STIC Search Report
Biotech-Chem Library

STIC Database Tracking Number: 143092

TO: Marcela Cordero Garcia **Location: REM/3C25/3C18** **Art Unit: 1654** **Monday, March 28, 2005** **Case Serial Number: 10/681827**	**From: Mary Jane Ruhl** **Location: Biotech-Chem Library** **Remsen 1-A-62** **Phone: 571-272-2524** **maryjane.ruhl@uspto.gov**

Search Notes

Examiner Cordero Garcia,

Here are the results for your recent search request.

Please feel free to contact me if you have any questions about these results.

Thank you for using STIC services. We appreciate the opportunity to serve you.

Sincerely,

Mary Jane Ruhl
Technical Information Specialist
STIC
Remsen 1-A-62
Ext. 22524

STIC SEARCH RESULTS FEEDBACK FORM

Biotech-Chem Library

Questions about the scope or the results of the search? Contact ***the searcher or contact***:

Mary Hale, Information Branch Supervisor
Remsen Bldg. 01 D86
571-272-2507

Voluntary Results Feedback Form

- *I am an examiner in Workgroup:* ☐ *Example: 1610*
- *Relevant prior art **found**, search results used as follows:*
  - ☐ 102 rejection
  - ☐ 103 rejection
  - ☐ Cited as being of interest.
  - ☐ Helped examiner better understand the invention.
  - ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature
  (journal articles, conference proceedings, new product announcements etc.)

- *Relevant prior art **not found**:*
  - ☐ Results verified the lack of relevant prior art (helped determine patentability).
  - ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to STIC-Biotech-Chem Library, Remsen Bldg.

ACCESS DB # 148699

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Scientific and Technical Information Center

SEARCH REQUEST FORM

Requester's Full Name: MARCELA M LORDERO GARCIA Examiner # : 80381 Date: 3/2/05
Art Unit: 1654 Phone Number: 2-2939 Serial Number: 10/681827
Location (Bldg/Room#): RFM3C3 Mailbox #): 3C18 Results Format Preferred (circle): PAPER DISK

****

To ensure an efficient and quality search, please attach a copy of the cover sheet, claims, and abstract or fill out the following:

Title of Invention: DIPEPTIDE PHENYL ETHERS

Inventors (please provide full names): SEE BIB ATTACHED

Earliest Priority Date: 10/7/03

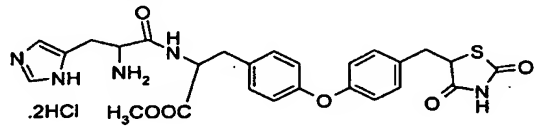
Search Topic:
Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known.

For Sequence Searches Only ***Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.***

PLEASE SEARCH THE FOLLOWING CMPD IN NPL & MARPAT.

NAME: 5-[4-(4-(2-(2-amino-3-imidazol-4-ylpropanamido)-2-methoxy carbonylethyl)phenoxy)benzyl]thiazolidin-2,4-dione dihydrochloride. (Compound A)

COMPOUND:



THANKS,

****

STAFF USE ONLY

Searcher: _____
Searcher Phone #: _____
Searcher Location: _____
Date Searcher Picked Up: _____
Date Completed: _____
Searcher Prep & Review Time: _____
Online Time: _____

Type of Search

_____ NA Sequence (#)
_____ AA Sequence (#)
_____ Structure (#)
_____ Bibliographic
_____ Litigation
_____ Fulltext
_____ Other

Vendors and cost where applicable

_____ STN _____ Dialog
_____ Questel/Orbit _____ Lexis/Nexis
_____ Westlaw _____ WWW/Internet
____In-house sequence systems
___Commercial ___Oligomer ____Score/Length
___ Interference ___ SPDI ____ Encode/Transl
_____ Other (specify)

```
=> d his ful

     FILE 'HCAPLUS' ENTERED AT 14:33:01 ON 28 MAR 2005
                  E NAG BISHWAJIT/AU
L1             72 SEA ABB=ON  ("NAG BISHWAGIT"/AU OR "NAG BISHWAJIT"/AU)
                  E NAG ABHIJEET/AU
L2              2 SEA ABB=ON  "NAG ABHIJEET"/AU
                  E DEY DEBENDRANATH/AU
L3             21 SEA ABB=ON  ("DEY DEBEDRANATH"/AU OR "DEY DEBENDRANATH"/AU)
                  E NEOGI PARTHA/AU
L4             27 SEA ABB=ON  "NEOGI PARTHA"/AU
L5              0 SEA ABB=ON  L1 AND L2 AND L3 AND L4
L6             93 SEA ABB=ON  L1 OR L2 OR L3 OR L4
L7              0 SEA ABB=ON  L6 AND ?DIPEPTIDE?(W)PHENYL?
L8              1 SEA ABB=ON  L6 AND PHENYL(W)?ETHER?

     FILE 'REGISTRY' ENTERED AT 14:36:16 ON 28 MAR 2005
L9            168 SEA ABB=ON  (188576-13-8/BI OR 2295-31-0/BI OR 2346-26-1/BI --etc.

     FILE 'HCAPLUS' ENTERED AT 14:36:43 ON 28 MAR 2005
L10             1 SEA ABB=ON  L8 AND L9

     FILE 'REGISTRY' ENTERED AT 14:48:24 ON 28 MAR 2005
L11               STRUCTURE
L12             0 SEA SSS SAM L11
L13             0 SEA SSS FUL L11
L14               STR L11
L15             0 SEA SSS SAM L14
L16               STR L14
L17             0 SEA SSS SAM L16
L18             0 SEA SSS FUL L16
L19               STR L16
L20             0 SEA SSS SAM L19
L21               STR L19
L22             0 SEA SSS SAM L21
L23               STR L21
L24             0 SEA SSS SAM L23
L25            10 SEA SSS FUL L23

     FILE 'HCAPLUS' ENTERED AT 15:01:55 ON 28 MAR 2005
L26             3 SEA ABB=ON  L25

     FILE 'MARPAT' ENTERED AT 15:02:14 ON 28 MAR 2005
L27             0 SEA SSS SAM L23
L28            10 SEA SSS FUL L23
L29               STR L11
L30             0 SEA SSS SAM L29
L31             0 SEA SSS FUL L29
L32             0 SEA SSS SAM L14
L33             0 SEA SSS FUL L14
```

full structure yielded 0 results

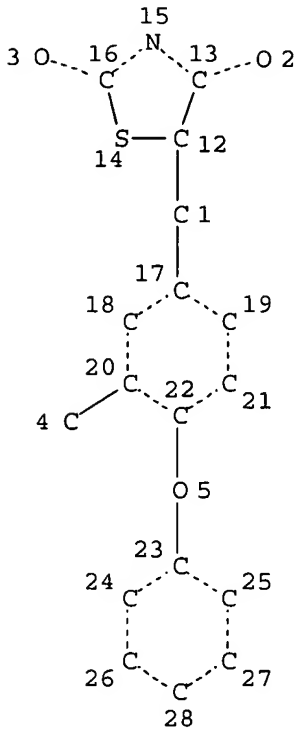
10 compds in Reg. for truncated structure — see d que stat

3 cits from CAPlus

10 cits from Marpat

no success in Marpat using full structure.

=> d que stat l26
L23 STR

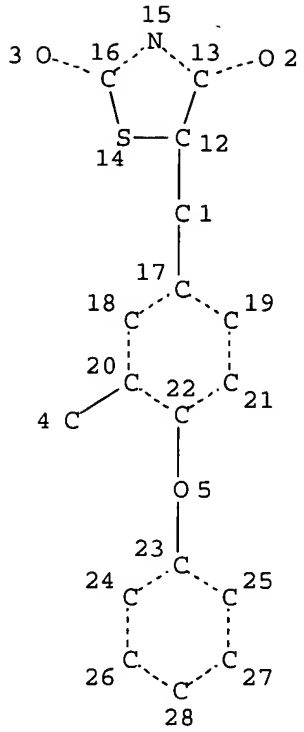


NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 22

STEREO ATTRIBUTES: NONE
L25 10 SEA FILE=REGISTRY SSS FUL L23
L26 3 SEA FILE=HCAPLUS ABB=ON L25

=> d que stat l28
L23 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 22

STEREO ATTRIBUTES: NONE
L28 10 SEA FILE=MARPAT SSS FUL L23

100.0% PROCESSED 734 ITERATIONS 10 ANSWERS
SEARCH TIME: 00.00.01

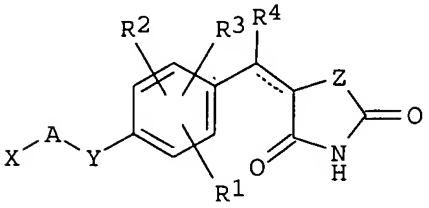
=> d ibib abs hitstr l26 1-3

L26 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:589256 HCAPLUS
DOCUMENT NUMBER: 141:140764
TITLE: Preparation of amino acid phenoxy ethers as inhibitors of cytokines
INVENTOR(S): Nag, Bishwajit; Nag, Abhijeet; Dey, Debendranath; Agarwal, Shiv Kumar
PATENT ASSIGNEE(S): Bexel Pharmaceuticals, Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 47 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004142991	A1	20040722	US 2003-356113	20030131
US 6794401	B2	20040921		
WO 2004066964	A2	20040812	WO 2004-US790	20040113
WO 2004066964	C2	20040902		
WO 2004066964	A3	20050224		

W: AE, AE, AG, AL, AL, AM, AM, AM, AT, AT, AU, AZ, AZ, BA, BB, BG, BG, BR, BR, BW, BY, BY, BZ, BZ, CA, CH, CN, CN, CO, CO, CR, CR, CU, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EC, EE, EE, EG, ES, ES, FI, FI, GB, GD, GE, GE, GH, GM, HR, HR, HU, HU, ID, IL, IN, IS, JP, JP, KE, KE, KG, KG, KP, KP, KP, KR, KR, KZ, KZ, KZ, LC, LK, LR, LS, LS, LT, LU, LV, MA, MD, MD, MG, MK, MN, MW, MX, MX, MZ, MZ, NA, NI

PRIORITY APPLN. INFO.: US 2003-440772P P 20030117
US 2003-356113 A 20030131
OTHER SOURCE(S): MARPAT 141:140764
GI



I

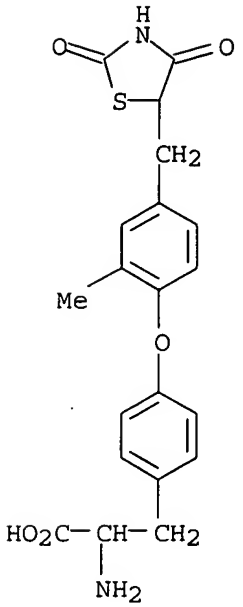
AB Novel amino acid Ph ethers, e.g. tyrosine Ph ethers, or tautomeric forms, stereoisomers, polymorphs, pharmaceutically acceptable salts, or pharmaceutically acceptable solvates thereof [I; wherein the dotted line represents an optional double bond; Y = O, S, NR (wherein R represents hydrogen or alkyl); Z = O, S; R1-R4 = H, halogen, HO, nitro, cyano, formyl, amino, alkyl, alkoxy; A = a bond or substituted or unsubstituted aryl, heterocyclyl or heteroaryl ring; X = an alpha aminocarboxylic acid or alpha aminocarboxylic acid derivative bonded to A or Y through its alpha side chain] are prepared Also provided are a method for reducing glucose, free fatty acids, cholesterol, or triglyceride levels in plasma,. These compds. inhibit cytokines such as TNFα, IL-6, and IL-1β and exhibit activity for the treatment of immunol. diseases mediated by

cytokines, autoimmune diseases such as multiple sclerosis and rheumatoid arthritis, inflammation mediated by cyclooxygenase, obesity, hyperlipidemia, hypertension, neurol. diseases and diabetes, or a disorder associated with insulin resistance. Unlike other thiazolidine-compds. (TZD mols.), the compds. I exhibit no adipocyte differentiation, reduce body weight gain, and appear to have no affinity for PPAR-g and thereby are different from known TZD mols., which typically have adipocyte differentiation activity, increase weight gain, and are PPAR-g agonists. Thus, Me 2-[(tert-butoxycarbonyl)amino]-3-(4-hydroxyphenyl)propanoate was treated with NaH in DMF and etherified with 4-Fluorobenzaldehyde at 80° to give Me 2-[(tert-butoxycarbonyl)amino]-3-[-(4-formylphenoxy)phenyl]propanoate which was condensed with 2,4-thiazolidinedione in the presence of benzoic acid and piperidine at 145-155° under reflux with continuous removal of water using Dean-Stark apparatus for 5 h followed by treatment with HCl in CH2Cl2 to give 5-[4-[4-(2-amino-2-methoxycarbonylethyl)phenoxy]benzylidene]thiazolidine-2,4-dione hydrochloride (II). Catalytic hydrogenation of II over Pd/C in methanol gave 5-[4-[4-(2-amino-2-methoxycarbonylethyl)phenoxy]benzyl]thiazolidine-2,4-dione (III). III lowered pro-inflammatory cytokines in human macrophage cells and in an animal model of inflammation inhibited carrageenan-induced paw edema in SD rats.

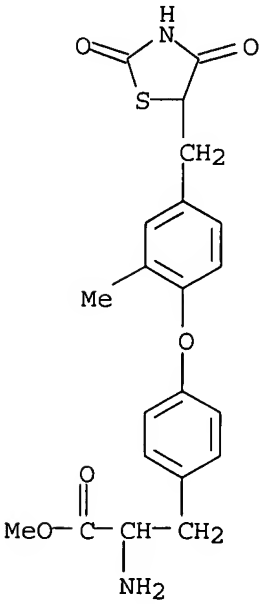
IT **724760-60-5P**, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-3-methylbenzyl]thiazolidine-2,4-dione **724760-61-6P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-3-methylbenzyl]thiazolidine-2,4-dione **724761-04-0P**, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-3-trifluoromethylbenzyl]thiazolidine-2,4-dione **724761-05-1P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-3-trifluoromethylbenzyl]thiazolidine-2,4-dione
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of tyrosine thiazolidinylmethylphenyl ether derivs. for treatment of immunol. diseases, inflammation, obesity, hyperlipidemia, hypertension, neurol. diseases, and diabetes)

RN 724760-60-5 HCAPLUS

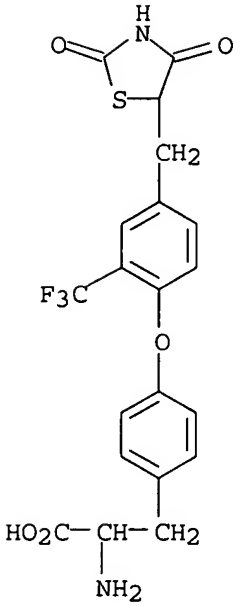
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]-2-methylphenyl]- (9CI) (CA INDEX NAME)



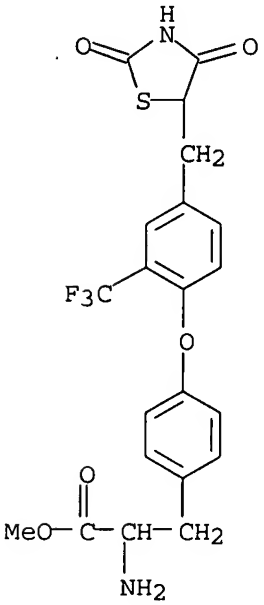
RN 724760-61-6 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]-2-methylphenyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 724761-04-0 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]-2-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



RN 724761-05-1 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]-2-(trifluoromethyl)phenyl]-, methyl ester (9CI) (CA INDEX NAME)



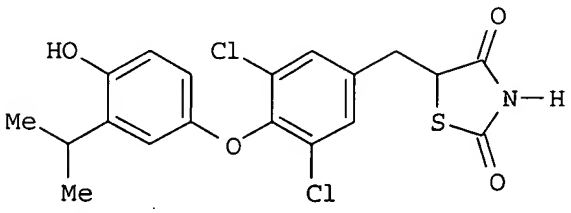
REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:780441 HCAPLUS
DOCUMENT NUMBER: 135:318502
TITLE: Preparation of [(hydroxyphenoxy)benzyl]thiazolidinedio

nes and analogs as thyroid receptor ligands
INVENTOR(S): Chiang, Yuan-Ching P.
PATENT ASSIGNEE(S): Pfizer Products Inc., USA
SOURCE: Eur. Pat. Appl., 51 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1148054	A1	20011024	EP 2001-303490	20010417
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 2001051645	A1	20011213	US 2001-836765	20010417
US 6620830	B2	20030916		
CA 2344574	AA	20011021	CA 2001-2344574	20010419
BR 2001001527	A	20011120	BR 2001-1527	20010419
JP 2002053564	A2	20020219	JP 2001-121188	20010419
US 2004110951	A1	20040610	US 2003-617436	20030711
PRIORITY APPLN. INFO.:			US 2000-199044P	P 20000421
			US 2001-836765	A3 20010417

OTHER SOURCE(S): MARPAT 135:318502
GI



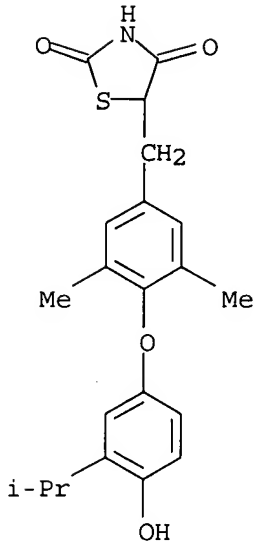
I

AB R1Z1Z2ZR [R = 3,4-dioxothiazolidin-5-ylmethyl, 3,5-dioxo[1,2,4]oxadiazolidin-2-ylmethyl, etc.; R1 = OH, alkoxy, acyloxy, etc.; Z,Z1 = e.g., (un)substituted 1,4-phenylene; Z2 = O, SO0-2, CH2, CO, (alkyl)imino, etc.] were prepared as thyroid receptor ligands (no data). Thus, [3,4-(Me2HC)(MeO)C6H3]2IBF4 was etherified by 3,5,4-Cl2(HO)C6H3CO2Et and the reduced product condensed with 2,4-thiazolidinedione to give, in 3 addnl. steps, title compound I.

IT **322472-23-1P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of [(hydroxyphenoxy)benzyl]thiazolidinediones and analogs as thyroid receptor ligands)

RN 322472-23-1 HCAPLUS

CN 2,4-Thiazolidinedione, 5-[[4-[4-hydroxy-3-(1-methylethyl)phenoxy]-3,5-dimethylphenyl]methyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:89629 HCAPLUS
DOCUMENT NUMBER: 134:131526
TITLE: Preparation of thiazolidine-2,4-diones and their use as thyroid hormone agonists for prevention and treatment of obesity, hypercholesterolemia, and atherosclerosis
INVENTOR(S): Kagechika, Hiroyuki; Fukazawa, Hiroshi
PATENT ASSIGNEE(S): Iyaku Bunshi Sekkei Kenkyusho K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001031660	A2	20010206	JP 1999-200556	19990714
PRIORITY APPLN. INFO.:			JP 1999-200556	19990714

OTHER SOURCE(S): MARPAT 134:131526
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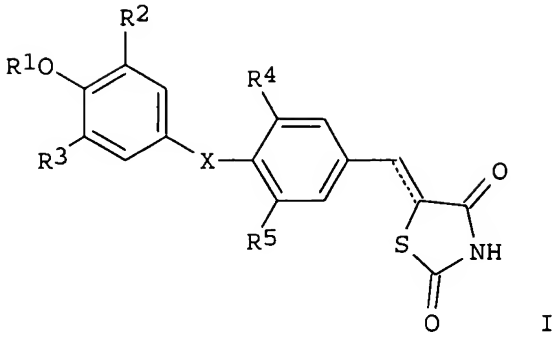


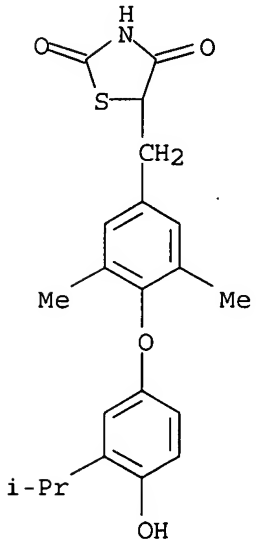
I

AB Title compds. I [R1 = H, C1-6 alkyl; R2-R5 = H, halo, C1-6 alkyl; X = O, S, NR6, CR7R8; CH(OR9), CO; R6-R9 = H, C1-6 alkyl; the broken line may be a bond] or their salts are prepared Condensation of thiazolidinedione with 3,5-diiodo-4-(p-methoxyphenoxy)benzaldehyde gave 66% I (R1 = Me, R2 = R3 = H, R4 = R5 = iodine, X = O, the broken line is bond), which was demethylated and iodinated to afford I (R1 = R2 = H, R3-R5 = iodine, X = O, the broken line is bond). The product activated human thyroid hormone receptor α in a dose-dependent manner.

IT **322472-23-1P 322472-59-3P 322472-64-0P**
322472-65-1P 322472-66-2P 322472-67-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of thiazolidine-2,4-diones as thyroid hormone agonists)

RN 322472-23-1 HCAPLUS

CN 2,4-Thiazolidinedione, 5-[[4-[4-hydroxy-3-(1-methylethyl)phenoxy]-3,5-dimethylphenyl]methyl]- (9CI) (CA INDEX NAME)



RN 322472-59-3 HCAPLUS

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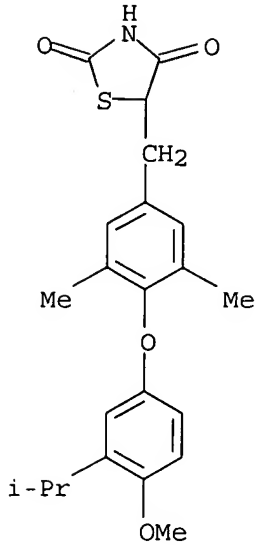

RN 322472-64-0 HCAPLUS
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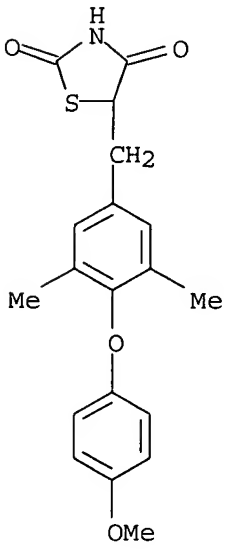

RN 322472-65-1 HCAPLUS
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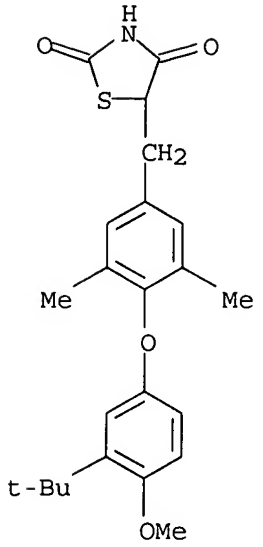
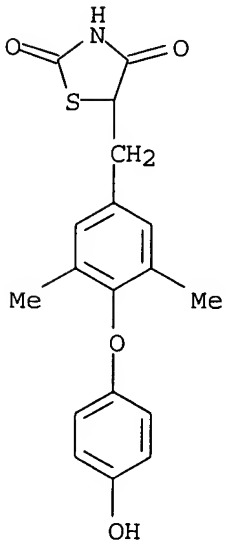
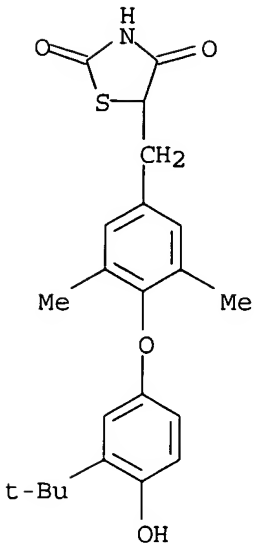


RN 322472-66-2 HCAPLUS
CN 2,4-Thiazolidinedione, 5-[[4-(4-hydroxyphenoxy)-3,5-dimethylphenyl]methyl]- (9CI) (CA INDEX NAME)



RN 322472-67-3 HCAPLUS
CN 2,4-Thiazolidinedione, 5-[[4-[3-(1,1-dimethylethyl)-4-hydroxyphenoxy]-3,5-dimethylphenyl]methyl]- (9CI) (CA INDEX NAME)


H
N
O
O
S
CH2
Me
Me
O
t-Bu
OH

All of the formats (except for SAM, SCAN, FHIT, HIT, FQHIT, or QHIT) may be used with the DISPLAY ACC command to display the record for a specified Accession Number.
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L28 ANSWER 1 OF 10 MARPAT COPYRIGHT 2005 ACS on STN
AN 141:395288 MARPAT
TI New [3,5-dihalo-4-(4-hydroxyphenoxy)phenyl]acetic acid derivatives useful as thyroid receptor ligands, and their preparation, pharmaceutical compositions, and methods of use
IN Ryono, Dennis E.; Hangeland, Jon J.; Friends, Todd J.; Dejneka, Tamara; Devasthale, Pratik; Caringal, Yolanda V.; Zhang, Minsheng; Doweyko, Arthur M. P.; Malm, Johan; Sanin, Andrei
PA Bristol-Myers Squibb Company, USA
SO PCT Int. Appl., 94 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K
CC 25-17 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
Section cross-reference(s): 1, 2, 63
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004093799	A2	20041104	WO 2004-US11883	20040416
	WO 2004093799	A3	20050224		
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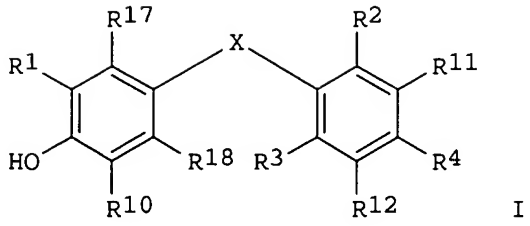
	RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 2005004184	A1	20050106	US 2004-826100	20040415

PRAI US 2003-463774P 20030418
GI



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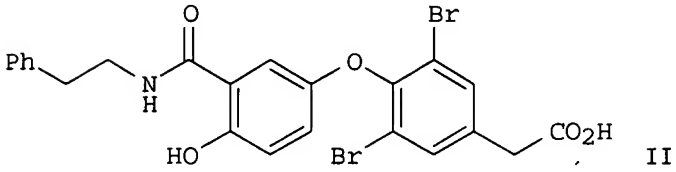

II

AB Thyroid receptor ligands are provided which have the general formula I [wherein: R1 = (un)substituted CONR5R6, CH2NR5R6, NR5COR6, OR7, R8, 4-R9-4,5-dihydrooxazol-2-yl; R2, R3 = H, halo, C1-4 alkyl or C3-5 cycloalkyl, provided that at least 1 of R2 and R3 ≠ H; R4 = (CH2)nR13 or (CH2)nCONR16CR13R14R15; R5, R6 = H, (hetero)aryl, (cyclo)alkyl, or (hetero)aralkyl; R7 = (hetero)aryl, alkyl, or (hetero)aralkyl; R8 = (hetero)aryl or cycloalkyl; R9 = R7 or H; R10 = H, halo, cyano, or alkyl; R11, R12 = H, halo, alkoxy, OH, cyano, or alkyl; R13 = COOH and esters, phosphonic and phosphinic acid and esters, sulfonic acid, tetrazole, hydroxamic acid, thiazolidinedione, acylsulfonamide, or other carboxylic acid surrogates; R14, R15 = H, alkyl; or R14R15 = (CH2)2-5, forming 3- to 6-membered cycloalkyl rings; R16 = H or C1-4 alkyl; R17 and R18 = H, halo, or alkyl; n = 0-4; X = O, S, S(O)2, S(O), Se, CO, NH, or CH2]. In addition, a method is provided for preventing, inhibiting or treating diseases or disorders associated with metabolism dysfunction, or which are dependent upon the expression of, a T3 regulated gene, wherein a compound I is administered therapeutically. Claims cover the above, as well as pharmaceutical compns. containing I, and methods of coadministration of I with other compds., particularly certain antidiabetic agents. Compds. I include selective agonists, partial agonists, antagonists, and partial antagonists of thyroid receptors (no data). Approx. 168 compds. were prepared For instance, Me (3,5-dibromo-4-hydroxyphenyl)acetate underwent O-arylation with (4-MeOC6H4)2I+ BF4-, and the resultant 4-methoxyphenyl ether derivative underwent a sequence of: (1) formylation in the 3-position, (2) O-demethylation, (3) oxidation of the aldehyde to an acid, (4) amidation of the acid, and (5) alkaline saponification of the ester, to give title compound II.

ST halohydroxyphenoxyphenylacetate prepn thyroid receptor ligand prepn treatment metab disorder; antidiabetic combination therapy thyroid receptor ligand bromo chloro prepn

IT Genetic element
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(TRE (thyroid hormone-responsive element), T3-regulated, treatment of associated diseases; preparation of [dihalo(hydroxyphenoxy)phenyl]acetic acid
derivs. as thyroid receptor ligands)

IT Antiarteriosclerotics

(antiatherosclerotics; preparation of [dihalo(hydroxyphenoxy)phenyl]acetic acid derivs. as thyroid receptor ligands)

IT Heart, disease
(arrhythmia, treatment; preparation of [dihalo(hydroxyphenoxy)phenyl]acetic acid derivs. as thyroid receptor ligands)

IT Mental disorder
(cognitive, treatment; preparation of [dihalo(hydroxyphenoxy)phenyl]acetic acid derivs. as thyroid receptor ligands)

IT Bone, disease
(demineralization, treatment; preparation of [dihalo(hydroxyphenoxy)phenyl]acetic acid derivs. as thyroid receptor ligands)

IT Mental disorder
(depression, treatment; preparation of [dihalo(hydroxyphenoxy)phenyl]acetic acid derivs. as thyroid receptor ligands)

IT Appetite
Cognition
Metabolism, animal
(disorder, treatment; preparation of [dihalo(hydroxyphenoxy)phenyl]acetic acid derivs. as thyroid receptor ligands)

IT Heart, disease
(failure, treatment; preparation of [dihalo(hydroxyphenoxy)phenyl]acetic acid derivs. as thyroid receptor ligands)

IT Thyroid hormones
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(inhibitors; preparation of [dihalo(hydroxyphenoxy)phenyl]acetic acid derivs. as thyroid receptor ligands)

IT Goiter
(non-toxic, treatment; preparation of [dihalo(hydroxyphenoxy)phenyl]acetic acid derivs. as thyroid receptor ligands)

IT Antidiabetic agents
(pharmaceutical compns. also containing; preparation of [dihalo(hydroxyphenoxy)phenyl]acetic acid derivs. as thyroid receptor ligands)

IT Antiarrhythmics
Anticholesteremic agents
Antidepressants
Antiglaucoma agents
Antiobesity agents
Cognition enhancers
Combination chemotherapy
(preparation of [dihalo(hydroxyphenoxy)phenyl]acetic acid derivs. as thyroid receptor ligands)

IT Thyroid hormone receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(preparation of [dihalo(hydroxyphenoxy)phenyl]acetic acid derivs. as thyroid receptor ligands)

IT Thyroid hormones
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of [dihalo(hydroxyphenoxy)phenyl]acetic acid derivs. as thyroid receptor ligands)

IT Hyperthyroidism
(subclin., treatment; preparation of [dihalo(hydroxyphenoxy)phenyl]acetic acid derivs. as thyroid receptor ligands)

IT Antitumor agents
(thyroid; preparation of [dihalo(hydroxyphenoxy)phenyl]acetic acid derivs.

as thyroid receptor ligands)

IT Atherosclerosis
Glaucoma (disease)
Hypercholesterolemia
Hypothyroidism
Obesity
Osteoporosis
Skin, disease
Thyroid gland, neoplasm
(treatment; preparation of [dihalo(hydroxyphenoxy)phenyl]acetic acid derivs. as thyroid receptor ligands)

IT Thyroid hormone receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(β, agonists; preparation of [dihalo(hydroxyphenoxy)phenyl]acetic acid derivs. as thyroid receptor ligands)

IT 725239-20-3P 725239-22-5P 725239-24-7P 725239-26-9P 725239-28-1P
725239-30-5P 725239-32-7P 725239-34-9P 725239-35-0P 725239-37-2P
725239-39-4P 725239-41-8P 725239-43-0P 725239-45-2P 725239-47-4P
725239-49-6P 725239-51-0P 725239-53-2P 725239-54-3P 725239-55-4P
725239-56-5P 725239-57-6P 725239-58-7P 725239-59-8P 725239-60-1P
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725239-72-5P 725239-73-6P 788822-75-3P 788822-76-4P 788822-77-5P
788822-78-6P 788822-79-7P 788822-80-0P 788822-81-1P 788822-82-2P
788822-83-3P 788822-84-4P 788822-85-5P 788822-86-6P 788822-87-7P
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788822-98-0P 788822-99-1P 788823-00-7P 788823-01-8P 788823-02-9P
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788823-98-3P 788823-99-4P 788824-00-0P 788824-01-1P 788824-02-2P
788824-03-3P 788824-04-4P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of [dihalo(hydroxyphenoxy)phenyl]acetic acid derivs. as thyroid receptor ligands)

IT 1426-58-0P, Bis(4-methoxyphenyl)iodonium tetrafluoroborate 348167-06-6P,
Methyl [3,5-dibromo-4-[(4-methoxyphenyl)oxy]phenyl]acetate 348167-18-0P,
Methyl [3,5-dibromo-4-[(3-amino-4-methoxyphenyl)oxy]phenyl]acetate
409366-27-4P, Methyl (3,5-dichloro-4-hydroxyphenyl)acetate 500794-80-9P,
Methyl 3,5-dibromo-4-[(3-nitro-4-methoxy-5-isopropylphenyl)oxy]benzoate

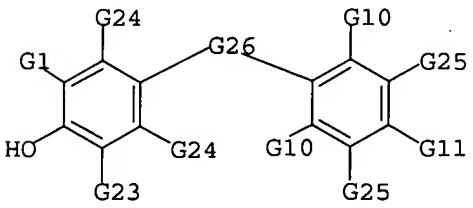
500794-81-0P, Methyl 3,5-dibromo-4-[(3-amino-4-methoxy-5-isopropylphenyl)oxy]benzoate 500794-82-1P, Methyl 3,5-dibromo-4-[(3-iodo-4-methoxy-5-isopropylphenyl)oxy]benzoate 649725-54-2P, Methyl [3,5-dibromo-4-[(3-formyl-4-hydroxyphenyl)oxy]phenyl]acetate 725239-16-7P, Methyl [3,5-dibromo-4-[(3-formyl-4-methoxyphenyl)oxy]phenyl]acetate 725239-18-9P, Methyl [3,5-dibromo-4-[(3-carboxy-4-hydroxyphenyl)oxy]phenyl]acetate 725239-75-8P, Methyl [3,5-dichloro-4-[(4-methoxyphenyl)oxy]phenyl]acetate 788824-05-5P, Methyl [3,5-dibromo-4-[[3-(phenethylcarbamoyl)-4-hydroxyphenyl]oxy]phenyl]acetate 788824-06-6P, Isobutyl 2,6-dichloro-4-(diazoacetyl)phenyl carbonate 788824-07-7P, Methyl [3,5-dichloro-4-[(isobutoxycarbonyl)oxy]phenyl]acetate 788824-08-8P, Methyl [3,5-dichloro-4-[(3-formyl-4-methoxyphenyl)oxy]phenyl]acetate 788824-09-9P, Methyl [3,5-dichloro-4-[(3-carboxy-4-hydroxyphenyl)oxy]phenyl]acetate 788824-10-2P, Methyl [3,5-dichloro-4-[[3-(phenethylcarbamoyl)-4-hydroxyphenyl]oxy]phenyl]acetate 788824-11-3P, Methyl [3,5-dibromo-4-[[3-[(phenethylamino)methyl]-4-hydroxyphenyl]oxy]phenyl]acetate 788824-12-4P, Methyl [3,5-dibromo-4-[(3-carboxy-4-methoxyphenyl)oxy]phenyl]acetate 788824-13-5P, Methyl [3,5-dibromo-4-[[3-[(tert-butoxycarbonyl)amino]-4-methoxyphenyl]oxy]phenyl]acetate 788824-14-6P, Methyl [3,5-dibromo-4-[[3-(hydrocinnamoylamino)-4-methoxyphenyl]oxy]phenyl]acetate 788824-15-7P, Methyl [3,5-dibromo-4-[[3-(hydrocinnamoylamino)-4-hydroxyphenyl]oxy]phenyl]acetate 788824-16-8P, Methyl [3,5-dibromo-4-[(3-hydroxy-4-methoxyphenyl)oxy]phenyl]acetate 788824-17-9P, Methyl [3,5-dibromo-4-[[3-[[4-(trifluoromethyl)phenyl]oxy]-4-methoxyphenyl]oxy]phenyl]acetate 788824-18-0P, Methyl [3,5-dibromo-4-[[3-[[4-(trifluoromethyl)phenyl]oxy]-4-hydroxyphenyl]oxy]phenyl]acetate 788824-19-1P, Methyl [3,5-dichloro-4-[(3-hydroxy-4-methoxyphenyl)oxy]phenyl]acetate 788824-20-4P, Methyl [3,5-dichloro-4-[[3-[[(trifluoromethyl)sulfonyl]oxy]-4-methoxyphenyl]oxy]phenyl]acetate 788824-21-5P, Methyl [3,5-dichloro-4-[(3-phenyl-4-methoxyphenyl)oxy]phenyl]acetate 788824-22-6P, Methyl [3,5-dichloro-4-[(3-bromo-4-methoxyphenyl)oxy]phenyl]acetate 788824-23-7P, Methyl [3,5-dichloro-4-[[3-(4,4,5,5-tetramethyl-4,5-dihydro-1,3,2-dioxaborol-2-yl)-4-methoxyphenyl]oxy]phenyl]acetate 788824-24-8P, Methyl [3,5-dichloro-4-[[3-[4-(trifluoromethyl)phenyl]-4-methoxyphenyl]oxy]phenyl]acetate 788824-25-9P, Methyl [3,5-dibromo-4-[[3-[((1S)-2-hydroxy-1-phenylethyl)carbamoyl]-4-hydroxyphenyl]oxy]phenyl]acetate 788824-26-0P, Methyl [3,5-dibromo-4-[[3-((4S)-4-phenyl-4,5-dihydrooxazol-2-yl)-4-hydroxyphenyl]oxy]phenyl]acetate 788824-27-1P, Methyl [3,5-dibromo-4-[[3-((4R)-4-phenyl-4,5-dihydrooxazol-2-yl)-4-hydroxyphenyl]oxy]phenyl]acetate 788824-28-2P, Methyl [3,5-dibromo-4-[[3-(4-phenyloxazol-2-yl)-4-hydroxyphenyl]oxy]phenyl]acetate 788824-29-3P, 3,5-Dibromo-4-[(3-iodo-4-methoxy-5-isopropylphenyl)oxy]benzoic acid 788824-30-6P, Methyl 3,5-dichloro-4-[(3-phenyl-4-methoxyphenyl)oxy]benzoate 788824-31-7P, 3,5-Dichloro-4-[(3-phenyl-4-methoxyphenyl)oxy]benzenemethanol 788824-32-8P, 3,5-Dichloro-4-[(3-phenyl-4-hydroxyphenyl)oxy]benzyl bromide 788824-33-9P, Diethyl [3,5-dichloro-4-[(3-phenyl-4-hydroxyphenyl)oxy]benzyl]phosphonate 788824-34-0P, Ethyl [3,5-dichloro-4-[(3-phenyl-4-hydroxyphenyl)oxy]benzyl](methyl)phosphinate 788824-35-1P, 3,5-Dichloro-4-[(3-phenyl-4-methoxyphenyl)oxy]benzyl bromide 788824-36-2P, [3,5-Dichloro-4-[(3-phenyl-4-methoxyphenyl)oxy]phenyl]acetonitrile 788824-37-3P, 5-[3,5-Dichloro-4-[(3-phenyl-4-methoxyphenyl)oxy]benzyl]-1H-tetrazole
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)
(intermediate; preparation of [dihalo(hydroxyphenoxy)phenyl]acetic acid derivs. as thyroid receptor ligands)

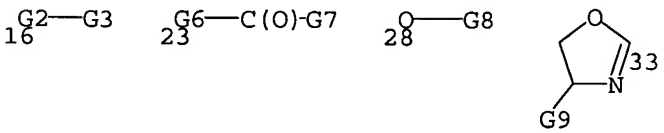
IT 94-20-2, Chloropropamide 657-24-9, Metformin 9004-10-8, Insulin, biological studies 10238-21-8, Glyburide 21187-98-4, Gliclazide 29094-61-9, Glipizide 56180-94-0, Acarbose 72432-03-2, Miglitol 93479-97-1, Glimepiride 97322-87-7, Troglitazone 109229-58-5, Englitazone 111025-46-8, Pioglitazone 122320-73-4, Rosiglitazone 141200-24-0, Darglitazone 430433-17-3, Glipyride
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical compns. also containing; preparation of [dihalo(hydroxyphenoxy)phenyl]acetic acid derivs. as thyroid receptor ligands)

IT 64-04-0, Phenethylamine 98-80-6, Phenylboronic acid 100-66-3, Anisole, reactions 109-04-6, 2-Bromopyridine 122-52-1, Triethyl phosphite 402-43-7, 4-(Trifluoromethyl)bromobenzene 501-52-0, Hydrocinnamic acid 543-27-1, Isobutyl chloroformate 3336-41-2, 3,5-Dichloro-4-hydroxybenzoic acid 15205-15-9, 2-Chloro-6-fluorobenzylamine 15715-41-0, Diethyl methylphosphonite 20989-17-7, (S)-Phenylglycinol 73183-34-3 128796-39-4, [p-(Trifluoromethyl)phenyl]boronic acid 212688-02-3, Methyl (3,5-dibromo-4-hydroxyphenyl)acetate 219692-11-2, Methyl 3,5-dibromo-4-(3-isopropyl-4-methoxyphenoxy)benzoate
RL: RCT (Reactant); RACT (Reactant or reagent)
(starting material; preparation of [dihalo(hydroxyphenoxy)phenyl]acetic acid derivs. as thyroid receptor ligands)

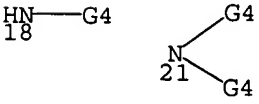
MSTR 1



G1 = 16 / 23 / 28 / aryl<EC (6-10) C, RC (1-2)> (SO) / heteroaryl<EC (0-) N (0-) O (0-) S> (SO) / Cb<EC (3-8) C, BD (0-2) D> (SO) / 33

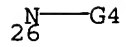


G2 = C(O) / CH2
G3 = NH2 / 18 / 21

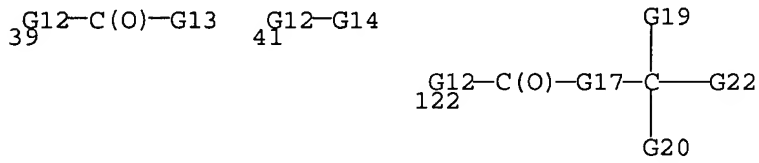


G4 = aryl<EC (6-10) C, RC (1-2)> (SO) /

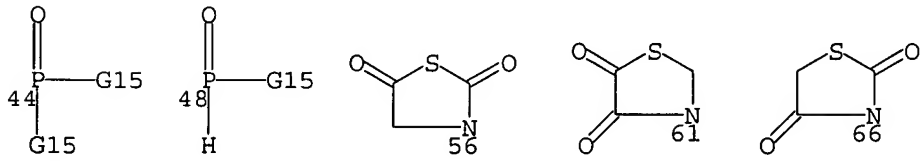
heteroaryl<EC (0-) N (0-) O (0-) S> (SO) /
alkyl<(1-12)> (SO (1-) G5) / Cb<EC (3-8) C, BD (0-2) D> (SO)
G5 = R / aryl<EC (6-10) C, RC (1-2)> (SO) /
heteroaryl<EC (0-) N (0-) O (0-) S> (SO)
G6 = NH / 26

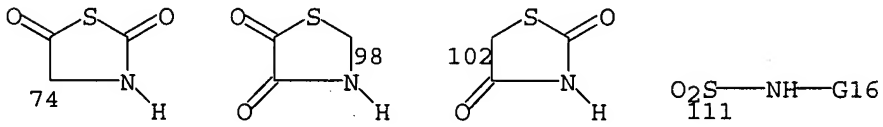


G7 = H / aryl<EC (6-10) C, RC (1-2)> (SO) /
heteroaryl<EC (0-) N (0-) O (0-) S> (SO) /
alkyl<(1-12)> (SO (1-) G5) / Cb<EC (3-8) C, BD (0-2) D> (SO)
G8 = aryl<EC (6-10) C, RC (1-2)> (SO) /
heteroaryl<EC (0-) N (0-) O (0-) S> (SO) /
alkyl<(1-12)> (SO (1-) G5)
G9 = H / aryl<EC (6-10) C, RC (1-2)> (SO) /
heteroaryl<EC (0-) N (0-) O (0-) S> (SO) /
alkyl<(1-12)> (SO (1-) G5)
G10 = (-1) H / F / Cl / Br / I / **CF3** / alkyl<(1-4)> (SO) /
Cb<EC (3-5) C, BD (0-2) D> (SO)
G11 = 39 / 41 / 122

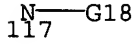


G12 = **(0-4) CH2**
G13 = OH (SO) / NHOH
G14 = 44 / 48 / SO3H / tetrazolyl / 56 / 61 / 66 / 74 /
98 / **102** / 111 / R<TX "carboxylic acid surrogate">





G15 = OH (SO)
G16 = acyl
G17 = NH / 117



G18 = alkyl<(1-4)> (SO)
G19 = alkyl<(1-12)> (SO) / H
G20 = alkyl<(1-12)> (SO) / H
G21 = (2-5) CH2
G22 = 123 / 126

G12—C(O)—G13 (123) G12—G14 (126)

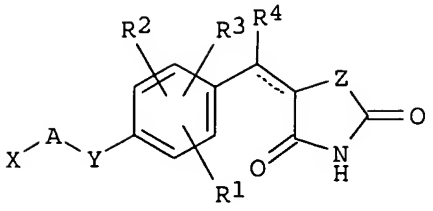
G23 = H / F / Cl / Br / I / CF3 / CN / alkyl<(1-12)> (SO)
G24 = H / F / Cl / Br / I / CF3 / alkyl<(1-12)> (SO)
G25 = H / F / Cl / Br / I / CF3 / alkoxy<(1-12)> (SO) / OH / CN / alkyl<(1-12)> (SO)
G26 = O / S / SO2 / S(O) / Se / C(O) / NH / CH2
G19+G20= G21
MPL: claim 1
NTE: and prodrugs and pharmaceutically acceptable salts
STE: and stereoisomers

L28 ANSWER 2 OF 10 MARPAT COPYRIGHT 2005 ACS on STN
AN 141:140764 MARPAT
TI Preparation of amino acid phenoxy ethers as inhibitors of cytokines
IN Nag, Bishwajit; Nag, Abhijeet; Dey, Debendranath; Agarwal, Shiv Kumar
PA Bexel Pharmaceuticals, Inc., USA
SO U.S. Pat. Appl. Publ., 47 pp.
CODEN: USXXCO
DT Patent
LA English
IC ICM C07D277-16
ICS A61K031-426; A61K031-421
NCL 514369000
CC 34-2 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 1
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004142991	A1	20040722	US 2003-356113	20030131
	US 6794401	B2	20040921		
	WO 2004066964	A2	20040812	WO 2004-US790	20040113
	WO 2004066964	C2	20040902		
	WO 2004066964	A3	20050224		

W: AE, AE, AG, AL, AL, AM, AM, AM, AT, AT, AU, AZ, AZ, BA, BB, BG, BG, BR, BR, BW, BY, BY, BZ, BZ, CA, CH, CN, CN, CO, CO, CR, CR, CU, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EC, EE, EE, EG, ES, ES, FI, FI, GB, GD, GE, GE, GH, GM, HR, HR, HU, HU, ID, IL, IN, IS, JP, JP, KE, KE, KG, KG, KP, KP, KP, KR, KR, KZ, KZ, KZ, LC, LK, LR, LS, LS, LT, LU, LV, MA, MD, MD, MG, MK, MN, MW, MX, MX, MZ, MZ, NA, NI

PRAI US 2003-440772P 20030117
US 2003-356113 20030131
GI



I

AB Novel amino acid Ph ethers, e.g. tyrosine Ph ethers, or tautomeric forms, stereoisomers, polymorphs, pharmaceutically acceptable salts, or pharmaceutically acceptable solvates thereof [I; wherein the dotted line represents an optional double bond; Y = O, S, NR (wherein R represents hydrogen or alkyl); Z = O, S; R1-R4 = H, halogen, HO, nitro, cyano, formyl, amino, alkyl, alkoxy; A = a bond or substituted or unsubstituted aryl, heterocyclyl or heteroaryl ring; X = an alpha aminocarboxylic acid or alpha aminocarboxylic acid derivative bonded to A or Y through its alpha side chain] are prepared Also provided are a method for reducing glucose, free fatty acids, cholesterol, or triglyceride levels in plasma,. These compds. inhibit cytokines such as TNFα, IL-6, and IL-1β and exhibit activity for the treatment of immunol. diseases mediated by cytokines, autoimmune diseases such as multiple sclerosis and rheumatoid arthritis, inflammation mediated by cyclooxygenase, obesity, hyperlipidemia, hypertension, neurol. diseases and diabetes, or a disorder associated with insulin resistance. Unlike other thiazolidine-compds. (TZD mols.), the compds. I exhibit no adipocyte differentiation, reduce body weight gain, and appear to have no affinity for PPAR-g and thereby are different from known TZD mols., which typically have adipocyte differentiation activity, increase weight gain, and are PPAR-g agonists. Thus, Me 2-[(tert-butoxycarbonyl)amino]-3-(4-hydroxyphenyl)propanoate was treated with NaH in DMF and etherified with 4-Fluorobenzaldehyde at 80° to give Me 2-[(tert-butoxycarbonyl)amino]-3-[-(4-formylphenoxy)phenyl]propanoate which was condensed with 2,4-thiazolidinedione in the presence of benzoic acid and piperidine at 145-155° under reflux with continuous removal of water using Dean-Stark apparatus for 5 h followed by treatment with HCl in CH2Cl2 to give 5-[4-[4-(2-amino-2-methoxycarbonylethyl)phenoxy]benzylidene]thiazolidine-2,4-dione hydrochloride (II). Catalytic hydrogenation of II over Pd/C in methanol gave 5-[4-[4-(2-amino-2-methoxycarbonylethyl)phenoxy]benzyl]thiazolidine-2,4-dione (III). III lowered pro-inflammatory cytokines in human macrophage cells and in an animal model of inflammation inhibited carrageenan-induced paw edema in SD rats.

ST amino acid phenoxy ether prepn inhibitor cytokine; tyrosine phenyl ether prepn treatment cytokine mediated immunol disease; autoimmune diseases treatment tyrosine phenyl ether prepn; multiple sclerosis rheumatoid arthritis treatment tyrosine phenyl ether prepn; inflammation mediated cyclooxygenase treatment tyrosine phenyl ether prepn; obesity hyperlipidemia hypertension treatment tyrosine phenyl ether prepn; neurol disease diabetes treatment tyrosine thiazolidinylmethylphenyl ether prepn

IT Fatty acids, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(agents for reducing free fatty acids in plasma; preparation of tyrosine thiazolidinylmethylphenyl ether derivs. for treatment of immunol. diseases, inflammation, obesity, hyperlipidemia, hypertension, neurol. diseases, and diabetes)

IT Glycerides, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)

(agents for reducing triglycerides in plasma; preparation of tyrosine thiazolidinylmethylphenyl ether derivs. for treatment of immunol. diseases, inflammation, obesity, hyperlipidemia, hypertension, neurol. diseases, and diabetes)

IT Immunity
(disorder; preparation of tyrosine thiazolidinylmethylphenyl ether derivs. for treatment of immunol. diseases, inflammation, obesity, hyperlipidemia, hypertension, neurol. diseases, and diabetes)

IT Lipids, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(hyperlipidemia; preparation of tyrosine thiazolidinylmethylphenyl ether derivs. for treatment of immunol. diseases, inflammation, obesity, hyperlipidemia, hypertension, neurol. diseases, and diabetes)

IT Anti-inflammatory agents
Anticholesteremic agents
Antidiabetic agents
Antihypertensives
Antiobesity agents
Antirheumatic agents
Autoimmune disease
Diabetes mellitus
Human
Hypertension
Hypolipemic agents
Inflammation
Multiple sclerosis
Nervous system, disease
Obesity
Rheumatoid arthritis
(preparation of tyrosine thiazolidinylmethylphenyl ether derivs. for treatment of immunol. diseases, inflammation, obesity, hyperlipidemia, hypertension, neurol. diseases, and diabetes)

IT Amino acids, preparation
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of tyrosine thiazolidinylmethylphenyl ether derivs. for treatment of immunol. diseases, inflammation, obesity, hyperlipidemia, hypertension, neurol. diseases, and diabetes)

IT Cytokines
Interleukin 1β
Interleukin 6
Tumor necrosis factors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(preparation of tyrosine thiazolidinylmethylphenyl ethers derivs. as inhibitors of TNFα, IL-6, and IL-1β)

IT 9004-10-8, Insulin, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(disorders associated with insulin resistance; preparation of tyrosine thiazolidinylmethylphenyl ether derivs. for treatment of immunol. diseases, inflammation, obesity, hyperlipidemia, hypertension, neurol. diseases, and diabetes)

IT 39391-18-9, Cyclooxygenase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitors; preparation of tyrosine thiazolidinylmethylphenyl ether derivs. for treatment of immunol. diseases, inflammation, obesity, hyperlipidemia, hypertension, neurol. diseases, and diabetes)

IT 724760-26-3P, 5-[4-[4-(2-tert-Butoxycarbonylamino-2-methoxycarbonylethyl)phenoxy]benzylidene]thiazolidine-2,4-dione

724760-27-4P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]benzylidene]thiazolidine-2,4-dione
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(intermediate; preparation of tyrosine thiazolidinylmethylphenyl ether derivs. for treatment of immunol. diseases, inflammation, obesity, hyperlipidemia, hypertension, neurol. diseases, and diabetes)

IT 724760-25-2P, Methyl 2-[(tert-butoxycarbonyl)amino]-3-[4-(4-formylphenoxy)phenyl]propanoate
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of tyrosine thiazolidinylmethylphenyl ether derivs. for treatment of immunol. diseases, inflammation, obesity, hyperlipidemia, hypertension, neurol. diseases, and diabetes)

IT 724760-24-1P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]benzyl]thiazolidine-2,4-dione hydrochloride 724760-28-5P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]benzyl]thiazolidine-2,4-dione 724760-29-6P, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]benzylidene]thiazolidine-2,4-dione 724760-30-9P, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]benzyl]thiazolidine-2,4-dione 724760-31-0P, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]benzylidene]oxazolidine-2,4-dione 724760-32-1P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]benzylidene]oxazolidine-2,4-dione 724760-33-2P, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]benzyl]oxazolidine-2,4-dione 724760-34-3P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]benzyl]oxazolidine-2,4-dione 724760-35-4P, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-2,6-difluorobenzylidene]oxazolidine-2,4-dione 724760-36-5P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-2,6-difluorobenzylidene]oxazolidine-2,4-dione 724760-37-6P, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-2,6-difluorobenzyl]oxazolidine-2,4-dione 724760-38-7P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-2,6-difluorobenzyl]oxazolidine-2,4-dione 724760-39-8P, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-2,6-difluorobenzylidene]thiazolidine-2,4-dione 724760-40-1P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-2,6-difluorobenzylidene]thiazolidine-2,4-dione 724760-41-2P, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-2,6-difluorobenzyl]thiazolidine-2,4-dione 724760-42-3P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-2,6-difluorobenzyl]thiazolidine-2,4-dione 724760-43-4P, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-2,3-difluorobenzylidene]thiazolidine-2,4-dione 724760-44-5P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-2,3-difluorobenzylidene]thiazolidine-2,4-dione 724760-45-6P, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-2,3-difluorobenzyl]thiazolidine-2,4-dione 724760-46-7P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-2,3-difluorobenzyl]thiazolidine-2,4-dione 724760-47-8P, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-2,3-difluorobenzylidene]oxazolidine-2,4-dione 724760-49-0P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-2,3-difluorobenzylidene]oxazolidine-2,4-dione 724760-50-3P, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-2,3-difluorobenzyl]oxazolidine-2,4-dione 724760-51-4P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-2,3-difluorobenzyl]oxazolidine-2,4-dione 724760-52-5P, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-3-methylbenzylidene]oxazolidine-2,4-dione 724760-53-6P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-3-methylbenzylidene]oxazolidine-2,4-dione 724760-55-8P, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-3-methylbenzyl]oxazolidine-2,4-dione 724760-56-9P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-3-methylbenzyl]oxazolidine-2,4-dione 724760-58-1P, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-3-methylbenzylidene]thiazolidine-2,4-dione

724760-59-2P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-3-methylbenzylidene]thiazolidine-2,4-dione 724760-60-5P, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-3-methylbenzyl]thiazolidine-2,4-dione 724760-61-6P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-3-methylbenzyl]thiazolidine-2,4-dione 724760-62-7P, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-3-nitrobenzylidene]thiazolidine-2,4-dione 724760-63-8P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-3-nitrobenzylidene]thiazolidine-2,4-dione 724760-64-9P, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-3-nitrobenzyl]thiazolidine-2,4-dione 724760-65-0P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-3-nitrobenzyl]thiazolidine-2,4-dione 724760-66-1P, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-3-nitrobenzylidene]oxazolidine-2,4-dione 724760-67-2P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-3-nitrobenzylidene]oxazolidine-2,4-dione 724760-68-3P, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-3-nitrobenzyl]oxazolidine-2,4-dione 724760-69-4P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-3-nitrobenzyl]oxazolidine-2,4-dione 724760-70-7P, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-3-aminobenzylidene]thiazolidine-2,4-dione 724760-71-8P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-3-aminobenzylidene]thiazolidine-2,4-dione 724760-72-9P, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-3-aminobenzyl]thiazolidine-2,4-dione 724760-73-0P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-3-aminobenzyl]thiazolidine-2,4-dione 724760-74-1P, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-3-aminobenzylidene]oxazolidine-2,4-dione 724760-75-2P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-3-aminobenzylidene]oxazolidine-2,4-dione 724760-76-3P, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-3-aminobenzyl]oxazolidine-2,4-dione 724760-77-4P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-3-aminobenzyl]oxazolidine-2,4-dione 724760-78-5P, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-2-fluorobenzylidene]thiazolidine-2,4-dione 724760-79-6P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-2-fluorobenzylidene]thiazolidine-2,4-dione 724760-80-9P, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-2-fluorobenzyl]thiazolidine-2,4-dione 724760-81-0P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-2-fluorobenzyl]thiazolidine-2,4-dione 724760-82-1P, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-2-fluorobenzylidene]oxazolidine-2,4-dione 724760-83-2P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-2-fluorobenzylidene]oxazolidine-2,4-dione 724760-84-3P, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-2-fluorobenzyl]oxazolidine-2,4-dione 724760-85-4P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-2-fluorobenzyl]oxazolidine-2,4-dione 724760-86-5P, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-3-fluorobenzylidene]thiazolidine-2,4-dione 724760-87-6P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-3-fluorobenzylidene]thiazolidine-2,4-dione 724760-88-7P, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-3-fluorobenzyl]thiazolidine-2,4-dione 724760-89-8P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-3-fluorobenzyl]thiazolidine-2,4-dione 724760-90-1P, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-3-fluorobenzylidene]oxazolidine-2,4-dione 724760-91-2P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-3-fluorobenzylidene]oxazolidine-2,4-dione 724760-92-3P, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-3-fluorobenzyl]oxazolidine-2,4-dione 724760-93-4P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-3-fluorobenzyl]oxazolidine-2,4-dione 724760-94-5P, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-2-trifluoromethylbenzylidene]thiazolidine-2,4-dione 724760-95-6P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-2-trifluoromethylbenzylidene]thiazolidine-2,4-dione 724760-96-7P, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-2-trifluoromethylbenzyl]thiazolidine-2,4-dione 724760-97-8P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-2-trifluoromethylbenzyl]thiazolidine-2,4-

dione 724760-98-9P, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-2-trifluoromethylbenzylidene]oxazolidine-2,4-dione 724760-99-0P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-2-trifluoromethylbenzylidene]oxazolidine-2,4-dione 724761-00-6P, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-2-trifluoromethylbenzyl]oxazolidine-2,4-dione 724761-01-7P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-2-trifluoromethylbenzyl]oxazolidine-2,4-dione 724761-02-8P, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-3-trifluoromethylbenzylidene]thiazolidine-2,4-dione 724761-03-9P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-3-trifluoromethylbenzylidene]thiazolidine-2,4-dione 724761-04-0P, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-3-trifluoromethylbenzyl]thiazolidine-2,4-dione 724761-05-1P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-3-trifluoromethylbenzyl]thiazolidine-2,4-dione 724761-06-2P, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-3-trifluoromethylbenzylidene]oxazolidine-2,4-dione 724761-07-3P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-3-trifluoromethylbenzylidene]oxazolidine-2,4-dione 724761-08-4P, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-3-trifluoromethylbenzyl]oxazolidine-2,4-dione 724761-09-5P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-3-trifluoromethylbenzyl]oxazolidine-2,4-dione 724761-10-8P, 5-[4-[4-(2-Amino-2-carboxyethyl)-2,6-difluorophenoxy]benzylidene]oxazolidine-2,4-dione 724761-11-9P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-2,6-difluorophenoxy]benzylidene]oxazolidine-2,4-dione 724761-12-0P, 5-[4-[4-(2-Amino-2-carboxyethyl)-2,6-difluorophenoxy]benzyl]oxazolidine-2,4-dione 724761-13-1P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-2,6-difluorophenoxy]benzyl]oxazolidine-2,4-dione 724761-14-2P, 5-[4-[4-(2-Amino-2-carboxyethyl)-2,6-difluorophenoxy]benzylidene]thiazolidine-2,4-dione 724761-15-3P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-2,6-difluorophenoxy]benzylidene]thiazolidine-2,4-dione 724761-16-4P, 5-[4-[4-(2-Amino-2-carboxyethyl)-2,6-difluorophenoxy]benzyl]thiazolidine-2,4-dione 724761-17-5P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-2,6-difluorophenoxy]benzyl]thiazolidine-2,4-dione 724761-18-6P, 5-[4-[4-(2-Amino-2-carboxyethyl)-2,3-difluorophenoxy]benzylidene]thiazolidine-2,4-dione 724761-19-7P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-2,3-difluorophenoxy]benzylidene]thiazolidine-2,4-dione 724761-20-0P, 5-[4-[4-(2-Amino-2-carboxyethyl)-2,3-difluorophenoxy]benzyl]thiazolidine-2,4-dione 724761-21-1P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-2,3-difluorophenoxy]benzyl]thiazolidine-2,4-dione 724761-22-2P, 5-[4-[4-(2-Amino-2-carboxyethyl)-2,3-difluorophenoxy]benzylidene]oxazolidine-2,4-dione 724761-23-3P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-2,3-difluorophenoxy]benzylidene]oxazolidine-2,4-dione 724761-24-4P, 5-[4-[4-(2-Amino-2-carboxyethyl)-2,3-difluorophenoxy]benzyl]oxazolidine-2,4-dione 724761-25-5P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-2,3-difluorophenoxy]benzyl]oxazolidine-2,4-dione 724761-26-6P, 5-[4-[4-(2-Amino-2-carboxyethyl)-3-methylphenoxy]benzylidene]oxazolidine-2,4-dione 724761-27-7P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-3-methylphenoxy]benzylidene]oxazolidine-2,4-dione 724761-28-8P, 5-[4-[4-(2-Amino-2-carboxyethyl)-3-methylphenoxy]benzyl]oxazolidine-2,4-dione 724761-29-9P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-3-methylphenoxy]benzyl]oxazolidine-2,4-dione 724761-30-2P, 5-[4-[4-(2-Amino-2-carboxyethyl)-3-methylphenoxy]benzylidene]thiazolidine-2,4-dione 724761-31-3P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-3-methylphenoxy]benzylidene]thiazolidine-2,4-dione 724761-32-4P, 5-[4-[4-(2-Amino-2-carboxyethyl)-3-methylphenoxy]benzyl]thiazolidine-2,4-dione 724761-33-5P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-3-methylphenoxy]benzyl]thiazolidine-2,4-dione 724761-34-6P, 5-[4-[4-(2-Amino-2-carboxyethyl)-3-nitrophenoxy]benzylidene]thiazolidine-2,4-dione 724761-35-7P,

5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-3-nitrophenoxy]benzylidene]thiazolidine-2,4-dione 724761-36-8P, 5-[4-[4-(2-Amino-2-carboxyethyl)-3-nitrophenoxy]benzyl]thiazolidine-2,4-dione 724761-37-9P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-3-nitrophenoxy]benzyl]thiazolidine-2,4-dione 724761-38-0P, 5-[4-[4-(2-Amino-2-carboxyethyl)-3-nitrophenoxy]benzylidene]oxazolidine-2,4-dione 724761-39-1P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-3-nitrophenoxy]benzylidene]oxazolidine-2,4-dione 724761-40-4P, 5-[4-[4-(2-Amino-2-carboxyethyl)-3-nitrophenoxy]benzyl]oxazolidine-2,4-dione 724761-41-5P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-3-nitrophenoxy]benzyl]oxazolidine-2,4-dione 724761-42-6P, 5-[4-[4-(2-Amino-2-carboxyethyl)-3-aminophenoxy]benzylidene]thiazolidine-2,4-dione 724761-43-7P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-3-aminophenoxy]benzylidene]thiazolidine-2,4-dione 724761-44-8P, 5-[4-[4-(2-Amino-2-carboxyethyl)-3-aminophenoxy]benzyl]thiazolidine-2,4-dione 724761-45-9P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-3-aminophenoxy]benzyl]thiazolidine-2,4-dione 724761-46-0P, 5-[4-[4-(2-Amino-2-carboxyethyl)-3-aminophenoxy]benzylidene]oxazolidine-2,4-dione 724761-47-1P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-3-aminophenoxy]benzylidene]oxazolidine-2,4-dione 724761-48-2P, 5-[4-[4-(2-Amino-2-carboxyethyl)-3-aminophenoxy]benzyl]oxazolidine-2,4-dione 724761-49-3P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-3-aminophenoxy]benzyl]oxazolidine-2,4-dione 724761-50-6P, 5-[4-[4-(2-Amino-2-carboxyethyl)-2-fluorophenoxy]benzylidene]thiazolidine-2,4-dione 724761-51-7P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-2-fluorophenoxy]benzylidene]thiazolidine-2,4-dione 724761-52-8P, 5-[4-[4-(2-Amino-2-carboxyethyl)-2-fluorophenoxy]benzyl]thiazolidine-2,4-dione 724761-53-9P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-2-fluorophenoxy]benzyl]thiazolidine-2,4-dione 724761-54-0P, 5-[4-[4-(2-Amino-2-carboxyethyl)-2-fluorophenoxy]benzylidene]oxazolidine-2,4-dione 724761-55-1P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-2-fluorophenoxy]benzylidene]oxazolidine-2,4-dione 724761-56-2P, 5-[4-[4-(2-Amino-2-carboxyethyl)-2-fluorophenoxy]benzyl]oxazolidine-2,4-dione 724761-57-3P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-2-fluorophenoxy]benzyl]oxazolidine-2,4-dione 724761-58-4P, 5-[4-[4-(2-Amino-2-carboxyethyl)-3-fluorophenoxy]benzylidene]thiazolidine-2,4-dione 724761-59-5P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-3-fluorophenoxy]benzylidene]thiazolidine-2,4-dione 724761-60-8P, 5-[4-[4-(2-Amino-2-carboxyethyl)-3-fluorophenoxy]benzyl]thiazolidine-2,4-dione 724761-61-9P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-3-fluorophenoxy]benzyl]thiazolidine-2,4-dione 724761-63-1P, 5-[4-[4-(2-Amino-2-carboxyethyl)-3-fluorophenoxy]benzylidene]oxazolidine-2,4-dione 724761-64-2P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-3-fluorophenoxy]benzylidene]oxazolidine-2,4-dione 724761-65-3P, 5-[4-[4-(2-Amino-2-carboxyethyl)-3-fluorophenoxy]benzyl]oxazolidine-2,4-dione 724761-66-4P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-3-fluorophenoxy]benzyl]oxazolidine-2,4-dione 724761-67-5P, 5-[4-[4-(2-Amino-2-carboxyethyl)-2-trifluoromethylphenoxy]benzylidene]thiazolidine-2,4-dione 724761-68-6P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-2-trifluoromethylphenoxy]benzylidene]thiazolidine-2,4-dione 724761-69-7P, 5-[4-[4-(2-Amino-2-carboxyethyl)-2-trifluoromethylphenoxy]benzyl]thiazolidine-2,4-dione 724761-70-0P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-2-trifluoromethylphenoxy]benzyl]thiazolidine-2,4-dione 724761-71-1P, 5-[4-[4-(2-Amino-2-carboxyethyl)-2-trifluoromethylphenoxy]benzylidene]oxazolidine-2,4-dione 724761-72-2P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-2-trifluoromethylphenoxy]benzylidene]oxazolidine-2,4-dione 724761-73-3P, 5-[4-[4-(2-Amino-2-carboxyethyl)-2-trifluoromethylphenoxy]benzyl]oxazolidine-2,4-dione 724761-74-4P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-2-trifluoromethylphenoxy]benzyl]oxazolidine-2,4-dione 724761-75-5P,

5-[4-[4-(2-Amino-2-carboxyethyl)-3-trifluoromethylphenoxy]benzylidene]thiazolidine-2,4-dione 724761-76-6P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-3-trifluoromethylphenoxy]benzylidene]thiazolidine-2,4-dione 724761-77-7P, 5-[4-[4-(2-Amino-2-carboxyethyl)-3-trifluoromethylphenoxy]benzyl]thiazolidine-2,4-dione 724761-78-8P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-3-trifluoromethylphenoxy]benzyl]thiazolidine-2,4-dione 724761-79-9P, 5-[4-[4-(2-Amino-2-carboxyethyl)-3-trifluoromethylphenoxy]benzylidene]oxazolidine-2,4-dione 724761-80-2P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-3-trifluoromethylphenoxy]benzylidene]oxazolidine-2,4-dione 724761-81-3P, 5-[4-[4-(2-Amino-2-carboxyethyl)-3-trifluoromethylphenoxy]benzyl]oxazolidine-2,4-dione 724761-82-4P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-3-trifluoromethylphenoxy]benzyl]oxazolidine-2,4-dione 724761-83-5P, 5-[4-[4-(2-tert-Butoxycarbonylamino-2-methoxycarbonylethyl)phenoxy]benzyl]thiazolidine-2,4-dione 724761-84-6P, 5-[4-[4-(2-tert-Butoxycarbonylamino-2-methoxycarbonylethyl)phenoxy]benzylidene]oxazolidine-2,4-dione 724761-85-7P, 5-[4-[4-(2-tert-Butoxycarbonylamino-2-methoxycarbonylethyl)phenoxy]benzyl]oxazolidine-2,4-dione 724761-86-8P, 5-[4-[4-(2-tert-Butoxycarbonylamino-2-carboxyethyl)phenoxy]benzylidene]thiazolidine-2,4-dione 724761-87-9P, 5-[4-[4-(2-tert-Butoxycarbonylamino-2-carboxyethyl)phenoxy]benzyl]thiazolidine-2,4-dione 724761-88-0P, 5-[4-[4-(2-tert-Butoxycarbonylamino-2-carboxyethyl)phenoxy]benzylidene]oxazolidine-2,4-dione 724761-89-1P, 5-[4-[4-(2-t-Butoxycarbonylamino-2-carboxyethyl)phenoxy]benzyl]oxazolidine-2,4-dione
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of tyrosine thiazolidinylmethylphenyl ether derivs. for treatment of immunol. diseases, inflammation, obesity, hyperlipidemia, hypertension, neurol. diseases, and diabetes)

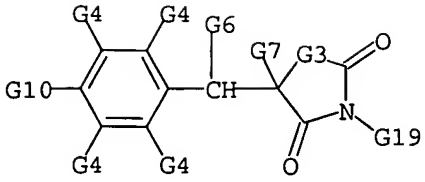
IT 459-57-4, 4-Fluorobenzaldehyde 2295-31-0, 2,4-Thiazolidinedione 2346-26-1, 2,4-Oxazolidinedione 188576-13-8, Methyl 2-[(tert-butoxycarbonyl)amino]-3-(4-hydroxyphenyl)propanoate
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactant; preparation of tyrosine thiazolidinylmethylphenyl ether derivs. for treatment of immunol. diseases, inflammation, obesity, hyperlipidemia, hypertension, neurol. diseases, and diabetes)

RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD

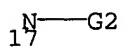
RE

(1) Anon; WO 0064888 2000 CAPLUS
(2) Anon; WO 0102377 A1 2001 CAPLUS
(3) Anon; EP 1148054 A1 2001 CAPLUS
(4) Druzgala; US 6680387 B2 2004 CAPLUS
(5) Fujita; US 6706746 B2 2004 CAPLUS
(6) Gravestock; US 6617339 B1 2003 CAPLUS
(7) Hindley; US 6686475 B2 2004 CAPLUS
(8) Malamas; US 6699896 B1 2004 CAPLUS
(9) Miyachi; US 6730687 B1 2004 CAPLUS
(10) Neogi; US 6331633 B1 2001
(11) Otterlei; US 5166137 A 1992 CAPLUS
(12) Penza; US 5527546 A 1996
(13) Seno; US 6147100 A 2000 CAPLUS
(14) Serlupi-Crescenzi; US 6004813 A 1999 CAPLUS
(15) Sohda; US 5441971 A 1995 CAPLUS
(16) Sohda; US 6552058 B1 2003 CAPLUS
(17) Tajima; US 6664281 B1 2003 CAPLUS
(18) Yoneda; US 6667328 B2 2003 CAPLUS

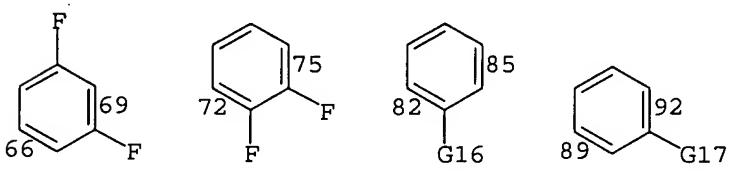
MSTR 1



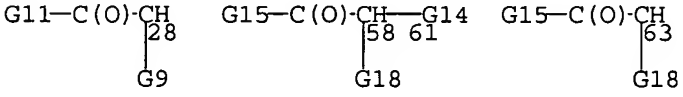
G1 = **O** / S / NH / 17



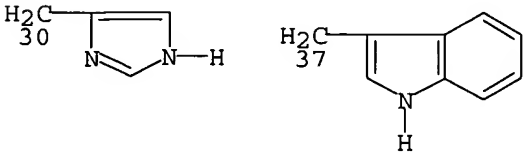
G2 = alkyl
G3 = O / **S**
G4 = (1-) H / F / Cl / Br / I / OH / NO2 / **CN** / CHO / NH2 / alkyl (SO) / alkoxy (SO) / (SC Me / CF3)
G5 = NULL / arylene (SO (1-) G12) / Hy (SO (1-) G12) / heteroarylene (SO (1-) G12) / **(SC p-C6H4** / 66-24 69-16 / 72-24 75-16 / 82-24 85-16 / 89-24 92-16)



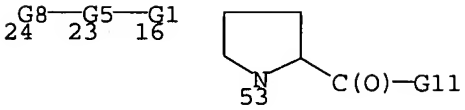
G6 = H / F / Cl / Br / I / OH / NO2 / CN / CHO / NH2 / alkyl (SO) / alkoxy (SO)
G7 = H
G8 = 28 / 61 / 63 / R<TX "amino acid residue">



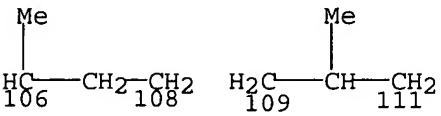
G9 = H / R<TX "amino acid side chain"> / (SC CH2CH2CH2NHC(NH)NH2 / CH2CONH2 / CH2SH / CH2CH2CONH2 / 30 / CH2CH2CH2CH2NH2 / CH2CH2SMe / CH2CH2CH2NH2 / CH2OH / CH(OH)Me / 37 / CH2C6H4OH-p)



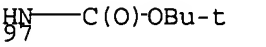
G10 = 16 / (SC 53)



G11 = OH (SO) / (SC alkoxy / OMe) / (EX NH2)
G12 = R / (EX F / Cl / Br / I / OH / NO2 / CN / CHO / NH2 / alkyl (SO (1-) G13) / alkoxy (SO (1-) G13))
G13 = R / F / Cl / Br / I
G14 = R<TX "amino acid side chain"> / alkylene (SO) / (SC CH2 / 106-58 108-23 / 109-58 111-23)

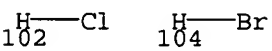


G15 = OH (SO) / (SC OMe) / (EX alkoxy / NH2)
G16 = F / Me / NO2 / NH2 / CF3
G17 = F / CF3
G18 = NH2 (SO) / (SC 97)



G19 = H / 100

G20 = R<TX "pharmaceutically acceptable salt"> / (SC 102 / 104 / Na / K / Mg)

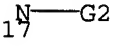


G6 +G7 = NULL
MPL: claim 1
NTE: and tautomers, polymorphs, and pharmaceutically acceptable solvates
STE: and stereoisomers

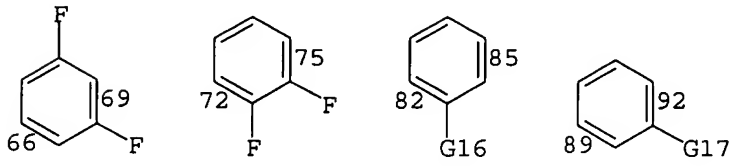
MSTR 2

G10—H

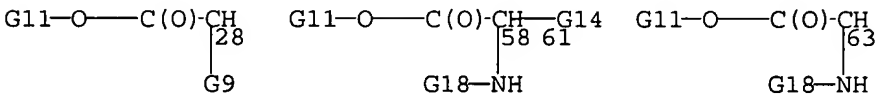
G1 = O / S / NH / 17



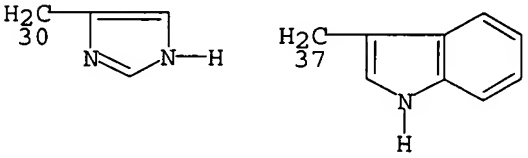
G2 = alkyl
G5 = NULL / arylene (SO (1-) G12) / Hy (SO (1-) G12) / heteroarylene (SO (1-) G12) / (SC p-C6H4 / 66-24 69-16 / 72-24 75-16 / 82-24 85-16 / 89-24 92-16)



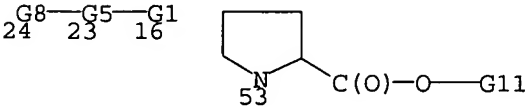
G8 = 28 / 61 / 63 / R<TX "amino acid residue">



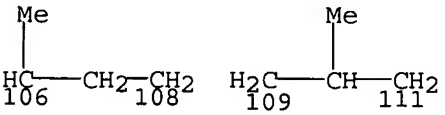
G9 = H / R<TX "amino acid side chain"> / (SC CH2CH2CH2NHC(NH)NH2 / CH2CONH2 / CH2SH / CH2CH2CONH2 / 30 / CH2CH2CH2CH2NH2 / CH2CH2SMe / CH2CH2CH2NH2 / CH2OH / CH(OH)Me / 37 / CH2C6H4OH-p)



G10 = 16 / (SC 53)

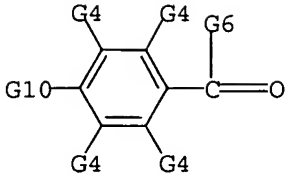


G11 = R<TX "protecting group">
G12 = R / (EX F / Cl / Br / I / OH / NO2 / CN / CHO / NH2 / alkyl (SO (1-) G13) / alkoxy (SO (1-) G13))
G13 = R / F / Cl / Br / I
G14 = R<TX "amino acid side chain"> / alkylene (SO) / (SC CH2 / 106-58 108-23 / 109-58 111-23)



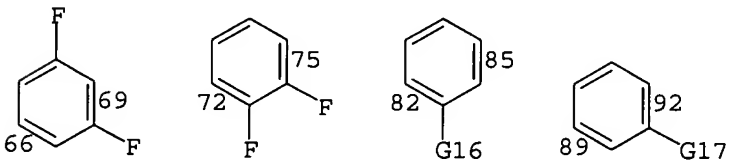
G16 = F / Me / NO2 / NH2 / CF3
G17 = F / CF3
G18 = R<TX "protecting group">
MPL: claim 18

MSTR 3

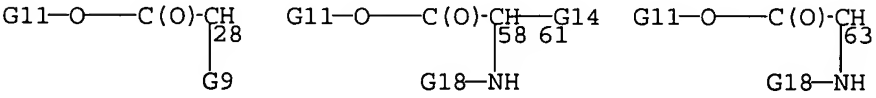


G1 = O / S / NH / 17

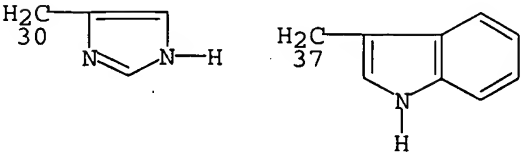
G2 = alkyl
G4 = (1-) H / F / Cl / Br / I / OH / NO2 / CN / CHO / NH2 / alkyl (SO) / alkoxy (SO) / (SC Me / CF3)
G5 = NULL / arylene (SO (1-) G12) / Hy (SO (1-) G12) / heteroarylene (SO (1-) G12) / (SC p-C6H4 / 66-24 69-16 / 72-24 75-16 / 82-24 85-16 / 89-24 92-16)



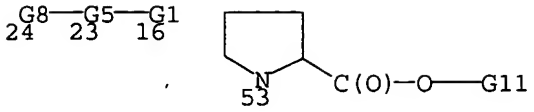
G6 = H / F / Cl / Br / I / OH / NO2 / CN / CHO / NH2 / alkyl (SO) / alkoxy (SO)
G8 = 28 / 61 / 63 / R<TX "amino acid residue">



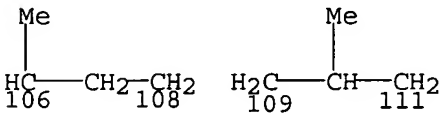
G9 = H / R<TX "amino acid side chain"> / (SC CH2CH2CH2NHC(NH)NH2 / CH2CONH2 / CH2SH / CH2CH2CONH2 / 30 / CH2CH2CH2CH2NH2 / CH2CH2SMe / CH2CH2CH2NH2 / CH2OH / CH(OH)Me / 37 / CH2C6H4OH-p)



G10 = 16 / R<TX "leaving group"> / (SC 53)

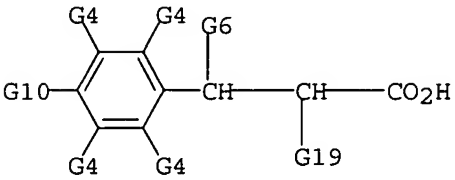


G11 = R<TX "protecting group">
G12 = R / (EX F / Cl / Br / I / OH / NO2 / CN / CHO / NH2 / alkyl (SO (1-) G13) / alkoxy (SO (1-) G13))
G13 = R / F / Cl / Br / I
G14 = R<TX "amino acid side chain"> / alkylene (SO) / (SC CH2 / 106-58 108-23 / 109-58 111-23)

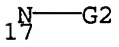


G16 = F / Me / NO2 / NH2 / CF3
G17 = F / CF3
G18 = R<TX "protecting group">
MPL: claim 18

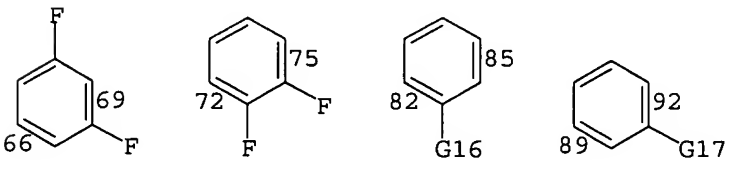
MSTR 4



G1 = O / S / NH / 17

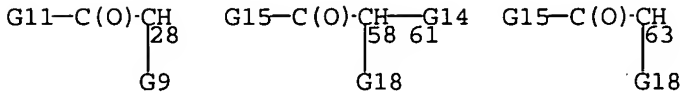


G2 = alkyl
G4 = (1-) H / F / Cl / Br / I / OH / NO2 / CN / CHO / NH2 / alkyl (SO) / alkoxy (SO) / (SC Me / CF3)
G5 = NULL / arylene (SO (1-) G12) / Hy (SO (1-) G12) / heteroarylene (SO (1-) G12) / (SC p-C6H4 / 66-24 69-16 / 72-24 75-16 / 82-24 85-16 / 89-24 92-16)

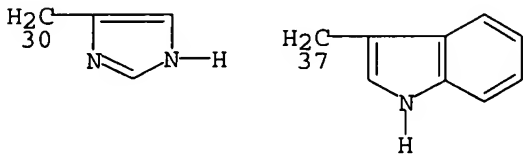


G6 = H / F / Cl / Br / I / OH / NO2 / CN / CHO / NH2 /

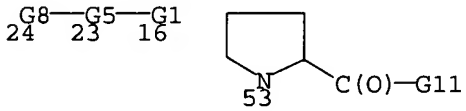
alkyl (SO) / alkoxy (SO)
G8 = 28 / 61 / 63 / R<TX "amino acid residue">



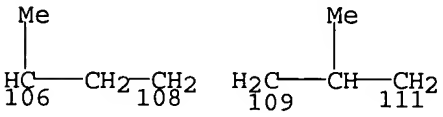
G9 = H / R<TX "amino acid side chain"> /
(SC CH2CH2CH2NHC(NH)NH2 / CH2CONH2 / CH2SH / CH2CH2CONH2 /
30 / CH2CH2CH2CH2NH2 / CH2CH2SMe / CH2CH2CH2NH2 / CH2OH /
CH(OH)Me / 37 / CH2C6H4OH-p)



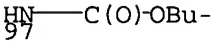
G10 = 16 / (SC 53)



G11 = OH (SO) / (SC alkoxy / OMe) / (EX NH2)
G12 = R / (EX F / Cl / Br / I / OH / NO2 / CN / CHO /
NH2 / alkyl (SO (1-) G13) / alkoxy (SO (1-) G13))
G13 = R / F / Cl / Br / I
G14 = R<TX "amino acid side chain"> / alkylene (SO) /
(SC CH2 / 106-58 108-23 / 109-58 111-23)

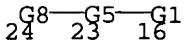


G15 = OH (SO) / (SC OMe) / (EX alkoxy / NH2)
G16 = F / Me / NO2 / NH2 / CF3
G17 = F / CF3
G18 = NH2 (SO) / (SC 97)

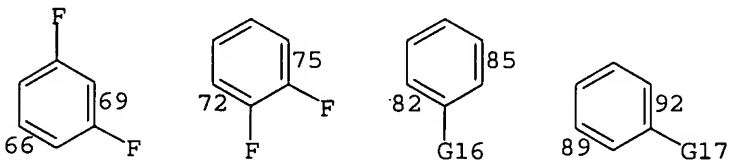


G19 = F / Cl / Br / I
MPL: claim 19

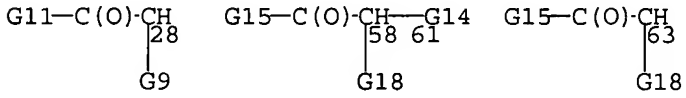
MSTR 5



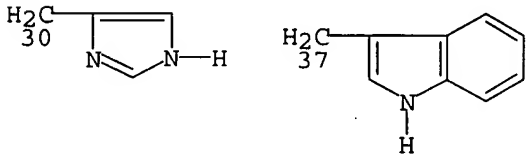
G1 = R<TX "leaving group"> / OH
G5 = NULL / arylene (SO (1-) G12) / Hy (SO (1-) G12) / heteroarylene (SO (1-) G12) / (SC p-C6H4 / 66-24 69-16 / 72-24 75-16 / 82-24 85-16 / 89-24 92-16)



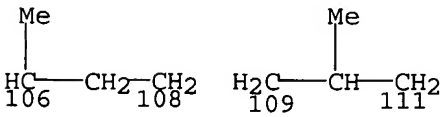
G8 = 28 / 61 / 63 / R<TX "amino acid residue">



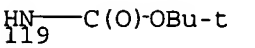
G9 = H / R<TX "amino acid side chain"> / (SC CH2CH2CH2NHC(NH)NH2 / CH2CONH2 / CH2SH / CH2CH2CONH2 / 30 / CH2CH2CH2CH2NH2 / CH2CH2SMe / CH2CH2CH2NH2 / CH2OH / CH(OH)Me / 37 / CH2C6H4OH-p)



G11 = OH (SO) / (SC alkoxy / OMe) / (EX NH2)
G12 = R / (EX F / Cl / Br / I / OH / NO2 / CN / CHO / NH2 / alkyl (SO (1-) G13) / alkoxy (SO (1-) G13))
G13 = R / F / Cl / Br / I
G14 = R<TX "amino acid side chain"> / alkylene (SO) / (SC CH2 / 106-58 108-23 / 109-58 111-23)

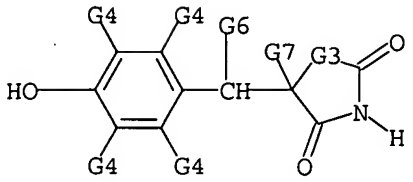


G15 = OH (SO) / (SC OMe) / (EX alkoxy / NH2)
G16 = F / Me / NO2 / NH2 / CF3
G17 = F / CF3
G18 = NH2 (SO) / (SC 119)



MPL: claim 20
NTE: also incorporates claim 21

MSTR 6



G3 = O / S
G4 = (1-) H / F / Cl / Br / I / OH / NO2 / CN / CHO / NH2 / alkyl (SO) / alkoxy (SO) / (SC Me / CF3)
G6 = H / F / Cl / Br / I / OH / NO2 / CN / CHO / NH2 / alkyl (SO) / alkoxy (SO)
G7 = H
G6 +G7 = NULL
MPL: claim 20

L28 ANSWER 3 OF 10 MARPAT COPYRIGHT 2005 ACS on STN
AN 141:17653 MARPAT
TI Method for promoting nail growth using thyromimetic compounds
IN Doherty, Niall Stephen; Parkinson, Tanya
PA Pfizer Products Inc., USA
SO PCT Int. Appl., 77 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K031-165
CC 1-12 (Pharmacology)
Section cross-reference(s): 63
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004047827	A1	20040610	WO 2003-IB5186	20031114

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI US 2002-429040P 20021125
AB The invention provides methods and compns. for increasing the rate of nail growth in mammals, especially humans, using thyromimetic compds.
ST nail growth promotion thyromimetic compd
IT Infection
(bacterial; thyromimetic compds. for promotion of nail growth, and use with other agents)

IT Heart
(cardiac-sparing thyromimetic compound; thyromimetic compds. for promotion of nail growth)
IT Cardiotoxicity
Heart
(cardiac-sparing thyromimetic compound; thyromimetic compds. for promotion of nail growth, and use with other agents)
IT Fungi
(infection; thyromimetic compds. for promotion of nail growth, and use with other agents)
IT Drug delivery systems
(prodrugs; thyromimetic compds. for promotion of nail growth)
IT Drug delivery systems
Human
Nail (anatomical)
(thyromimetic compds. for promotion of nail growth)
IT Thyroid hormones
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(thyromimetic compds. for promotion of nail growth)
IT Antibacterial agents
Fungicides
(thyromimetic compds. for promotion of nail growth, and use with other agents)
IT Drug delivery systems
(topical; thyromimetic compds. for promotion of nail growth)
IT Heart
(toxicity, cardiac-sparing thyromimetic compound; thyromimetic compds. for promotion of nail growth)
IT Heart
(toxicity, cardiac-sparing thyromimetic compound; thyromimetic compds. for promotion of nail growth, and use with other agents)
IT 290349-38-1 290349-63-2 290350-21-9 290350-58-2 290352-09-9
290352-10-2 290352-11-3 290352-28-2 290352-70-4 290352-71-5
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503631-66-1 503631-67-2 503631-68-3 503631-69-4 503631-70-7
503631-71-8 503631-72-9 503631-73-0 503631-74-1 503631-75-2
503631-76-3
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(thyromimetic compds. for promotion of nail growth)
IT 29342-05-0, Ciclopirox 84625-61-6, Itraconazole 86386-73-4,

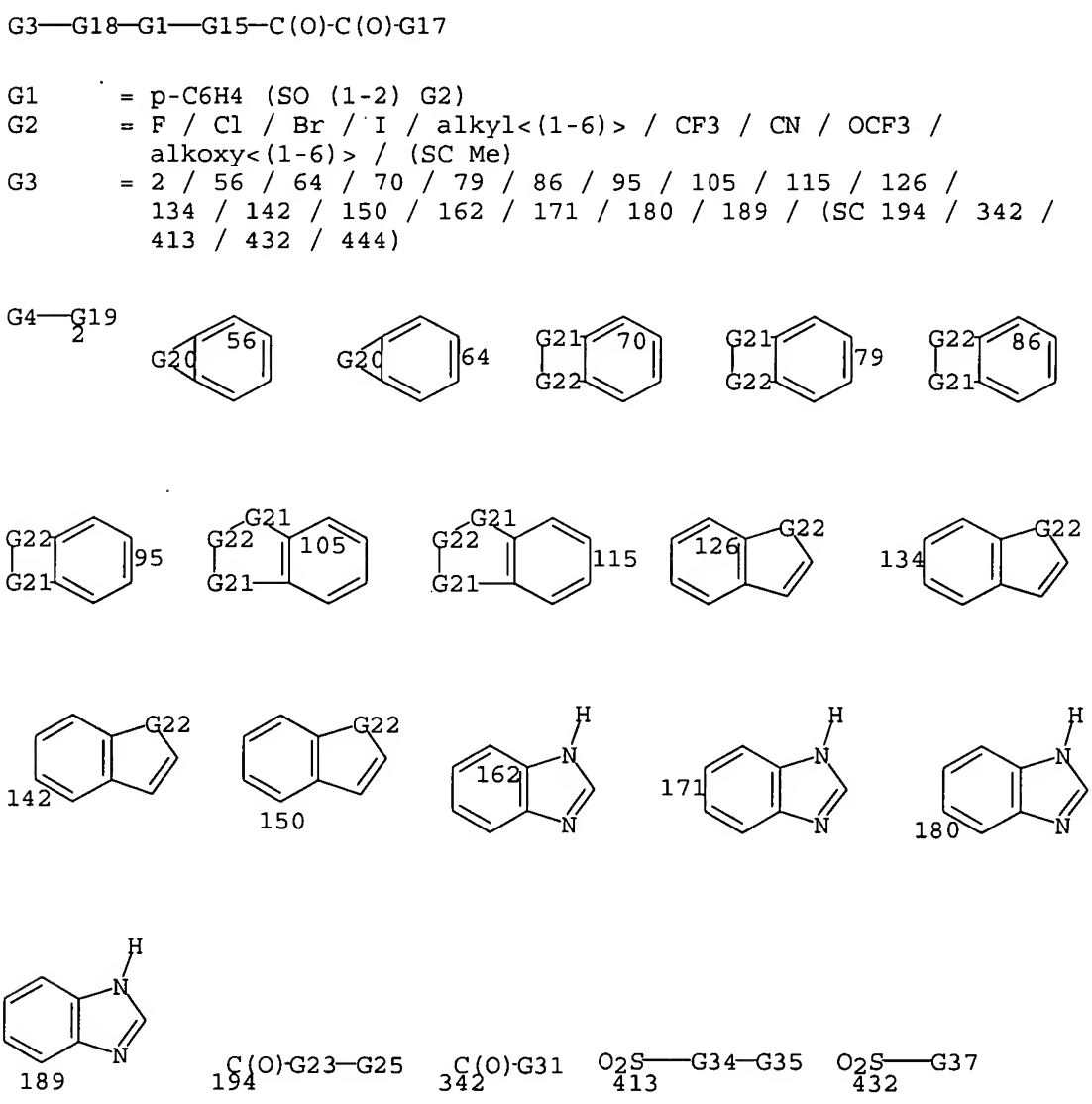
Fluconazole 91161-71-6, Terbinafine
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(thyromimetic compds. for promotion of nail growth, and use with other agents)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

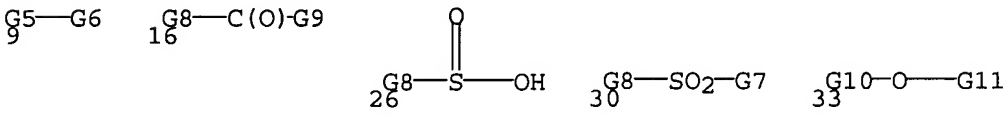
RE

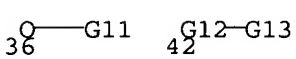
(1) Bean; ARCH INTERN MED 1980, V140, P73 MEDLINE
(2) Lee, D; WO 0051971 A 2000 CAPLUS
(3) Scott, Y; WO 0073265 A 2000 CAPLUS
(4) Scott, Y; WO 0073292 A 2000 CAPLUS

MSTR 1

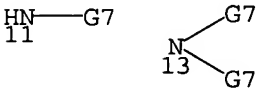


G4 = H / alkyl<(1-12)> (SO) / alkenyl<(2-12)> / F / Cl / Br / I / CN / aryl / heteroaryl<EC (0-) N (0-) O (0-) S (0) OTHERQ> / cycloalkyl<(3-10)> / Hy<EC (0-) N (0-) O (0-) S (0) OTHERQ, AR (0), BD (ALL) SE> / 9 / 16 / 26 / 30 / 33 / 36 / 42

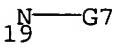




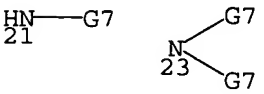
G5 = SO2 / C(O) / alkylene<(1-6)>
G6 = NH2 / 11 / 13 / Hy<EC (1-2) Q (1-) N (0-) O (0-) S (0) OTHERQ, AN (1-) N> (SO)



G7 = alkyl<(1-12)> (SO) / alkenyl<(2-12)> / cycloalkyl<(3-10)> (SO) / aryl (SO) / Hy<EC (1-8) Q (0-) N (0-) O (0-) S (0) OTHERQ, BD (0-) D (0-) T, RC (1-2), RS (0-) E4 (0-) E5 (0-) E6 (0-) E7 (0-) E8 (0) OTHER> (SO)
G8 = NH / 19

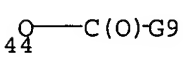


G9 = H / alkyl<(1-12)> (SO) / alkenyl<(2-12)> / cycloalkyl<(3-10)> (SO) / aryl (SO) / Hy<EC (1-8) Q (0-) N (0-) O (0-) S (0) OTHERQ, BD (0-) D (0-) T, RC (1-2), RS (0-) E4 (0-) E5 (0-) E6 (0-) E7 (0-) E8 (0) OTHER> (SO) / NH2 / 21 / 23 / Hy<EC (1-2) Q (1-) N (0-) O (0-) S (0) OTHERQ, AN (1-) N> (SO)

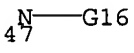


G10 = alkylene<(1-6)>
G11 = alkyl<(1-12)> / alkenyl<(2-12)> / cycloalkyl<(3-10)> / CF3 / 38 / 40 / aryl (SO) / Hy<EC (1-8) Q (0-) N (0-) O (0-) S (0) OTHERQ, BD (0-) D (0-) T, RC (1-2), RS (0-) E4 (0-) E5 (0-) E6 (0-) E7 (0-) E8 (0) OTHER> (SO)

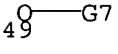
G12 = S / S(O) / SO2
G13 = alkyl<(1-12)> / alkenyl<(2-12)> / cycloalkyl<(3-10)> / aryl (SO) / Hy<EC (1-8) Q (0-) N (0-) O (0-) S (0) OTHERQ, BD (0-) D (0-) T, RC (1-2), RS (0-) E4 (0-) E5 (0-) E6 (0-) E7 (0-) E8 (0) OTHER> (SO)
G14 = F / Cl / Br / I / alkyl<(1-6)> / CF3 / CN / OCF3 / alkoxy<(1-6)> / OH / 44



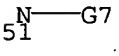
G15 = NH / 47



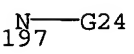
G16 = alkyl<(1-6)>
G17 = OH / 49 / NH2 / alkylamino<(1-6)> / dialkylamino<(1-6)> / (SC OMe / OEt / OPr-i / NHMe)



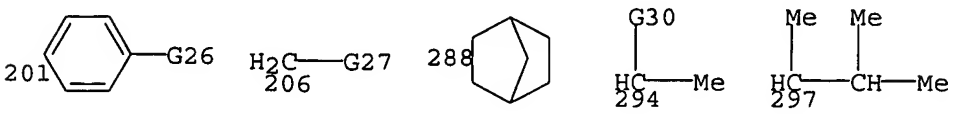
G18 = O / S / S(O) / SO2 / CH2 / NH / 51

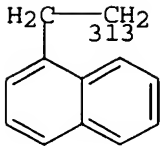


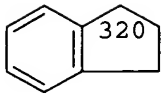
G19 = phenylene (SO (1-3) G14)
G20 = alkylene<EC (3-7) C, DC (0) M3>
G21 = alkylene<EC (2-6) C, DC (0) M3>
G22 = O / S / NH (SO)
G23 = NH / 197

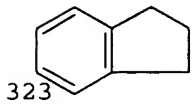


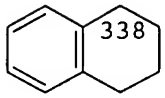
G24 = Me / Et
G25 = Me / Et / Pr-i / Pr-n / Bu-i / Bu-n / pentyl / hexyl / 201 / 206 / cyclopropyl / cyclobutyl / cyclopentyl / cyclohexyl / 288 / 294 / C(Me)2CH2Me / 297 / CH2CMe3 / 313 / 320 / 323 / 338



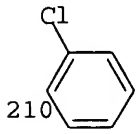


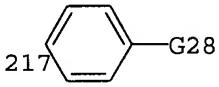


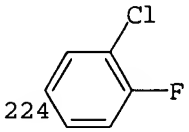


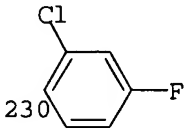


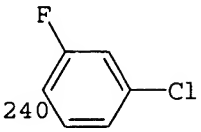
G26 = F / Ph
G27 = 2-thienyl / cyclopropyl / cyclohexyl / 210 / 217 / 224 / 230 / 240 / 248 / 256 / 264 / 272 / 1-naphthyl / 280

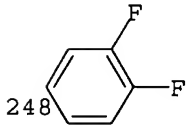


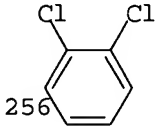


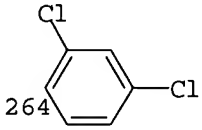


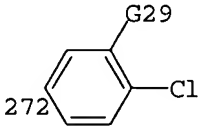


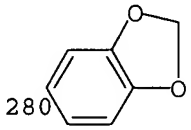




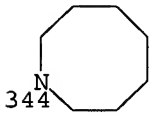


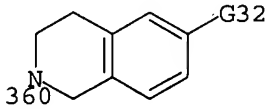


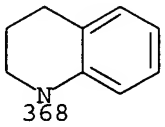


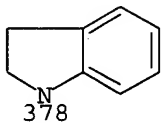


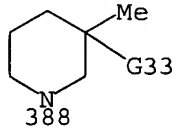
G28 = Cl / F / Pr-i / Bu-t
G29 = Cl / CF3
G30 = Ph / cyclohexyl / naphthyl
G31 = 344 / hexahydroazepino / piperidino / pyrrolidino / morpholino / 360 / 368 / 378 / 388 / 393 / 400 / 410

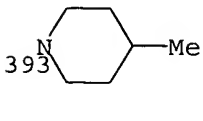


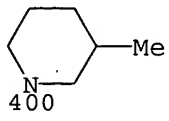


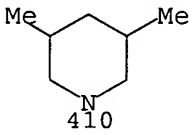




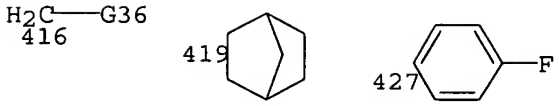




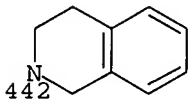




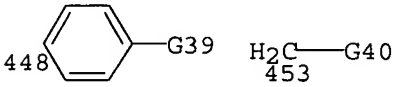
G32 = H / Me / OMe
G33 = Me / Ph
G34 = NH / NMe
G35 = Pr-i / 416 / cyclopropyl / 419 / Me / Et / 427 / cyclobutyl / cyclopentyl / cyclohexyl / Pr-n / Bu-n / pentyl / hexyl / octyl / decyl



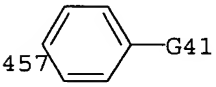
G36 = 2-thienyl / cyclopropyl / CH2OH
G37 = pyrrolidino / piperidino / morpholino / 442



G38 = 448 / naphthyl / 453 / Pr-i / cyclopentyl / p-C6H4Me / Me / Et / Bu-n / Pr-n

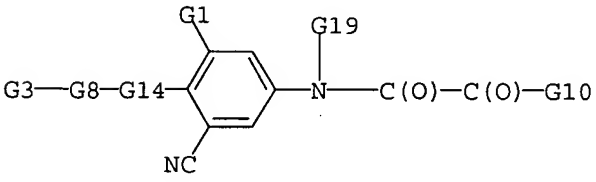


G39 = Cl / H
G40 = cyclopropyl / cyclobutyl / cyclohexyl / 457



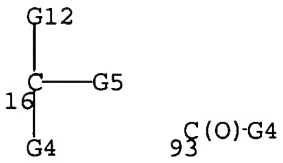
G41 = F / H
MPL: claim 4
NTE: or prodrugs or pharmaceutically acceptable salts
NTE: substitution is restricted
NTE: additional substitution also claimed
STE: or geometric or optical isomers

MSTR 2

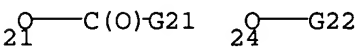


G1 = F / Cl / Br / I / alkyl<(1-8)> / CN / perfluoroalkyl<(1-8)> / (SC Me)
G2 = alkyl<(1-8)>
G3 = F / Cl / Br / I / perfluoroalkyl<(1-8)> / alkyl<(1-8)> / CHO / alkylcarbonyl<(1-8)> / alkyl<(1-8)> (SR OH) / aryl (SO (1-2) G16) / heteroaryl<EC (0-) N (0-) O (0-) S (0) OTHERQ> (SO (1-2) G16) / alkyl<(1-8)> (SR aryl) /

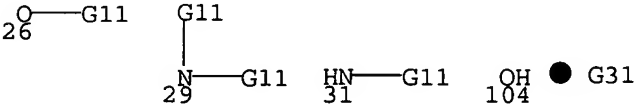
arylcarbonyl (SO (1-2) G16) / cycloalkyl<(3-10)>
(SO (1-2) G16) / alkyl<(1-8)> (SO cycloalkyl<(3-10)>) / 16 /
93



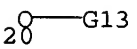
G4 = H / alkyl<(1-8)> / aryl (SO) /
heteroaryl<EC (0-) N (0-) O (0-) S (0) OTHERQ> (SO) /
alkyl<(1-8)> (SR aryl) / cycloalkyl<(3-10)> (SO) /
alkyl<(1-8)> (SR cycloalkyl<(3-10)>)
G5 = H / alkyl<(1-8)>
G6 = OH (SO) / 21 / 24



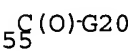
G7 = F / Cl / Br / I / alkyl<(1-8)> /
perfluoroalkyl<(1-8)>
G8 = phenylene (SR (3) G9)
G9 = (-1) G2 / (1) G6 / (-1) G7 / H
G10 = OH / 26 / NH2 / 29 / 31 / 104



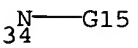
G11 = alkyl<(1-8)> / (SC Me / Et)
G12 = OH / 20



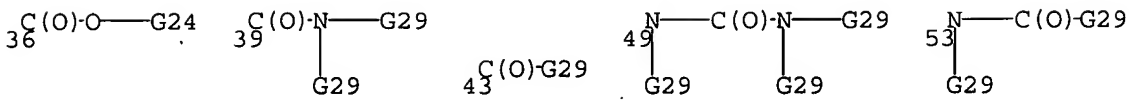
G13 = alkyl<(1-8)> / 55 / (SC Pr-i)



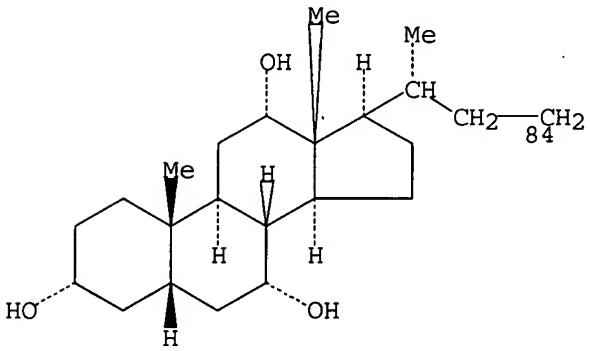
G14 = O / S / S(O) / SO2 / C(O) / NH / 34



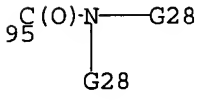
G15 = alkyl<(1-8)>
G16 = F / Cl / Br / I / CF3 / OCF3 / CN /
alkyl<(1-6)> (SO (1-) G17) / alkoxy<(1-6)> /
aryl (SO (1-) G18) / heteroaryl<EC (0-) N (0-) O (0-) S (0)
OTHERQ> (SO (1-) G18) / CO2H / 36 / 39 / 43 / 49 / 53



G17 = F / Cl / Br / I / OCF3 / CF3 / Ph
G18 = F / Cl / Br / I / OCF3 / CF3 / alkyl<(1-4)> / alkoxy<(1-4)>
G19 = H / alkyl<(1-8)> / perfluoroalkyl<(1-8)>
G20 = H / R / (EX alkyl<(1-8)> / alkyl<(1-8)> (SR G23) / aryl (SO) / heteroaryl<EC (0-) N (0-) O (0-) S (0) OTHERQ> (SO))
G21 = R / (EX alkyl<(1-12)> / aryl (SO) / heteroaryl<EC (0-) N (0-) O (0-) S (0) OTHERQ> (SO) / alkyl<(1-8)> (SR aryl) / 84)

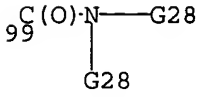


G22 = R / (EX alkyl<(1-8)> / alkenyl<(2-8)> / cycloalkyl<(5-7)> / alkyl<(1-8)> (SR G23) / 2-tetrahydropyranyl / alkyl<(1-8)> (SR cycloalkyl<(5-7)>))
G23 = aryl (SO) / heteroaryl<EC (0-) N (0-) O (0-) S (0) OTHERQ> (SO)
G24 = alkyl<(1-6)> / alkenyl<(2-6)> / alkyl<(1-6)> (SR alkoxy<(1-6)>) / aryl (SO (1-2) G30) / Hy<EC (1-4) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (1), RS (1) M4 (1) X8> (SO (1-2) G30) / Hy<EC (1-8) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (2), RS (0-) E4 (0-) E5 (0-) E6 (0-) E7 (0-) E8 (0) OTHER> (SO (1-2) G30) / alkyl<(1-4)> (SR G25) / alkyl<(1-4)> (SR G26) / alkyl<(1-4)> (SR OH) / alkyl<(1-4)> (SR (1-) G27) / alkyl<(1-4)> (SR 95) / cycloalkyl<(3-10)>



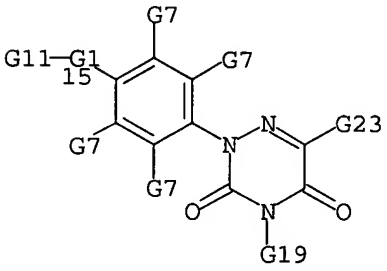
G25 = aryl (SO (1-2) G30)
G26 = Hy<EC (1-4) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (1), RS (1) M4 (1) X8> (SO (1-2) G30) / Hy<EC (1-8) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (2), RS (0-) E4 (0-) E5 (0-) E6 (0-) E7 (0-) E8 (0) OTHER> (SO (1-2) G30)
G27 = F / Cl / Br / I

G28 = H / alkyl<(1-6)> / cycloalkyl<(3-10)> / aryl (SO) / heteroaryl (SO)
G29 = H / alkyl<(1-6)> / alkenyl<(2-6)> / alkyl<(1-6)> (SR alkoxy<(1-6)>) / aryl (SO (1-2) G30) / Hy<EC (1-4) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (1), RS (1) M4 (1) X8> (SO (1-2) G30) / Hy<EC (1-8) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (2), RS (0-) E4 (0-) E5 (0-) E6 (0-) E7 (0-) E8 (0) OTHER> (SO (1-2) G30) / alkyl<(1-4)> (SR G25) / alkyl<(1-4)> (SR G26) / alkyl<(1-4)> (SR OH) / alkyl<(1-4)> (SR (1-) G27) / alkyl<(1-4)> (SR 99) / cycloalkyl<(3-10)>

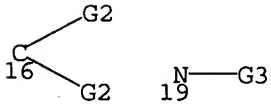


G30 = H / R
G31 = R<TX "pharmaceutically acceptable salt"> / (SC K / Na)
MPL: claim 4
NTE: or prodrugs
NTE: additional ring formation also claimed
STE: or geometric or optical isomers

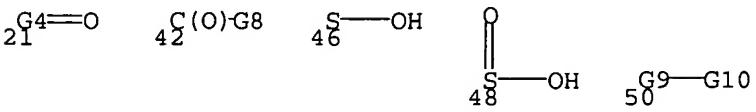
MSTR 3



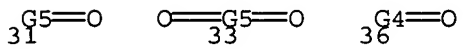
G1 = O / S / S(O) / SO2 / NH / 19 / C(O) / CH=CH / 16 / CHOH



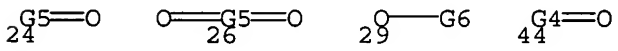
G2 = H / F
G3 = alkyl<(1-12)> (SO) / 21 / alkenyl<(2-6)> / cycloalkyl<(3-10)> / 42 / SH / 46 / 48 / 50



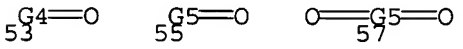
G4 = Ak<EC (1-12) C, BD (ALL) SE> (SO)
G5 = Hy<EC (4-8) A (1-4) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (1-3)> (SO)
G6 = Ph (SO) / naphthyl (SO) / biphenylyl (SO) / Hy<EC (4-8) A (1-4) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (1-3)> (SO) / 31 / 33 / alkyl<(1-12)> (SO) / 36 / alkenyl<(2-6)> / cycloalkyl<(3-10)>



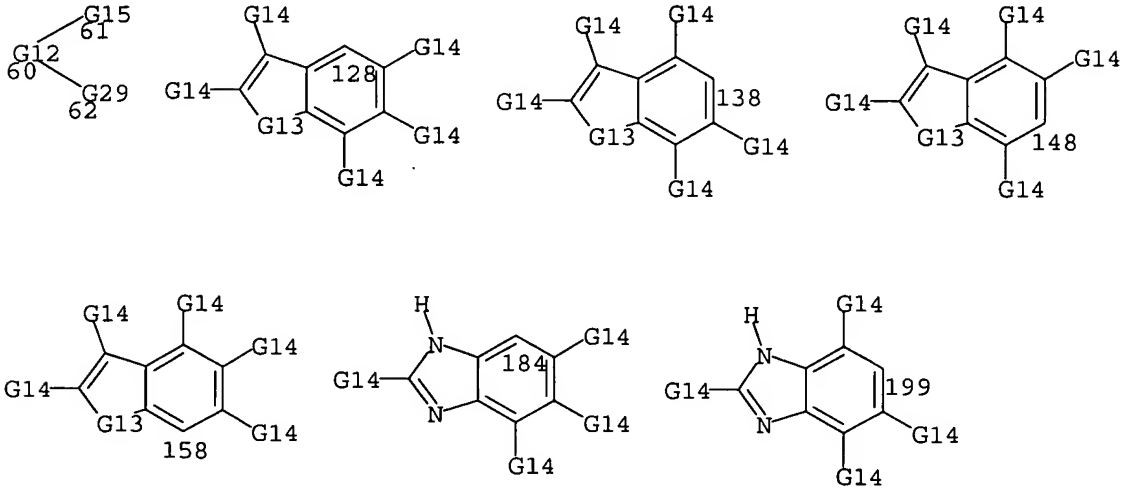
G7 = (2-) H / F / Cl / Br / I / alkyl<(1-6)> / CN / OH / alkoxy<(1-6)> (SO (1-) F) / CF3 / (SC Me)
G8 = H / alkyl<(1-12)> (SO) / 44 / alkenyl<(2-12)> / cycloalkyl<(3-10)> / Ph (SO) / naphthyl (SO) / biphenylyl (SO) / Hy<EC (4-8) A (1-4) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (1-3)> (SO) / 24 / 26 / 29

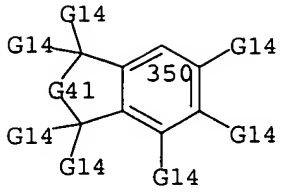


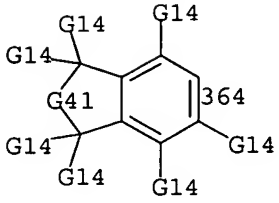
G9 = S / S(O) / SO2
G10 = alkyl<(1-12)> (SO) / 53 / alkenyl<(2-12)> / cycloalkyl<(3-10)> / Ph (SO) / naphthyl (SO) / biphenylyl (SO) / Hy<EC (4-8) A (1-4) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (1-3)> (SO) / 55 / 57

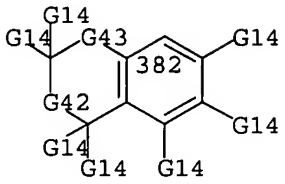


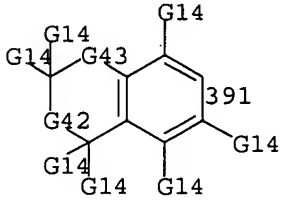
G11 = 60 / 128 / 138 / 148 / 158 / 184 / 199 / 350 / 364 / 382 / 391 / 406 / 421 / 450 / 462

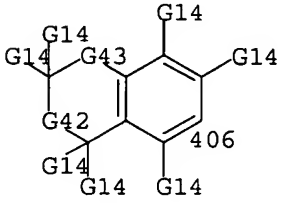


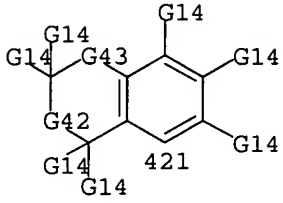


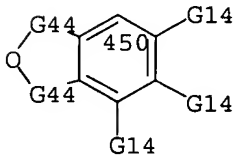


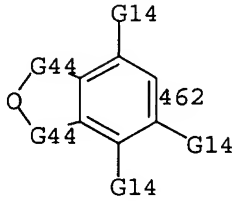




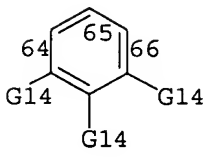


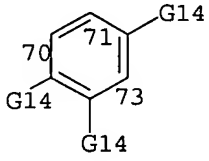


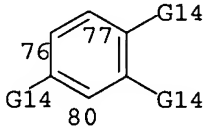


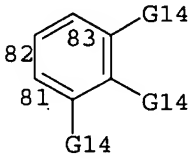


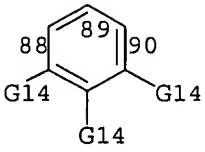
G12 = 64-15 65-61 66-62 / 70-15 71-61 73-62 /
76-15 77-61 80-62 / 82-15 83-61 81-62 / 88-15 90-61 89-62 /
94-15 96-61 97-62 / 100-15 102-61 104-62 /
106-15 108-61 105-62 / 112-15 115-61 113-62 /
118-15 121-61 120-62

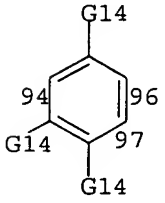


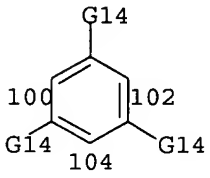


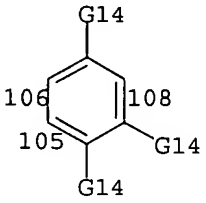


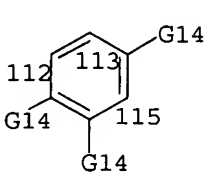


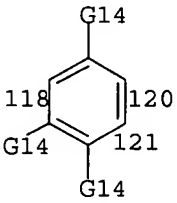




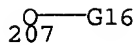




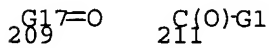




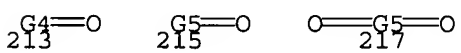
G13 = NH / O / S
G14 = H / R
G15 = OH / 207 / (SC OMe)



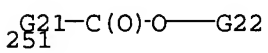
G16 = alkyl<(1-4)> (SO) / 209 / 211



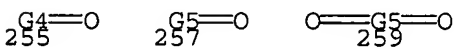
G17 = Ak<EC (1-4) C, BD (ALL) SE> (SO)
G18 = H / alkyl<(1-12)> (SO) / 213 / alkenyl<(2-12)> / cycloalkyl<(3-10)> / Ph (SO) / naphthyl (SO) / biphenylyl (SO) / Hy<EC (4-8) A (1-4) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (1-3)> (SO) / 215 / 217



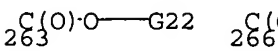
G19 = H / alkyl<(1-4)> (SO (1-) G20) / 251



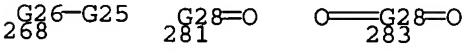
G20 = F / Cl / Br / I
G21 = (0-3) CH2
G22 = alkyl<(1-12)> (SO) / 255 / alkenyl<(2-12)> (SO Ph) / alkenyl<EC (2-12) C, BD (2) D> / cycloalkyl<(3-10)> / Ph (SO) / naphthyl (SO) / biphenylyl (SO) / Hy<EC (4-8) A (1-4) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (1-3)> (SO) / 257 / 259



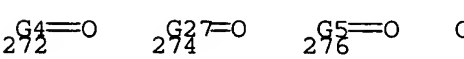
G23 = H / alkyl<(1-6)> / 263 / 266 / CN



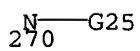
G24 = 268 / Hy<EC (4-8) A (1-4) Q (1-) N (0-) O (0-) S (0) OTHERQ, AN (1-) N, RC (1-3)> (SO) / 281 / 283



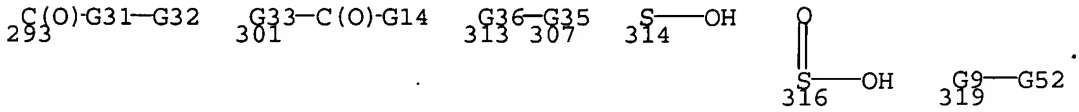
G25 = alkyl<(1-12)> (SO) / 272 / cycloalkyl<(3-10)> (SO) / 274 / alkenyl<(2-12)> / Hy<EC (4-8) A (1-4) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (1-3)> (SO) / 276 / 278

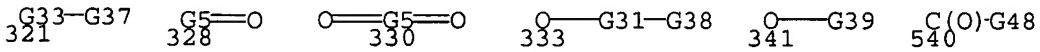


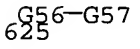
G26 = NH / 270



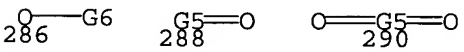
G27 = Cb<EC (3-10) C, AR (0), BD (ALL) SE> (SO)
G28 = Hy<EC (4-8) A (1-4) Q (1-) N (0-) O (0-) S (0) OTHERQ, AN (1-) N, RC (1-3)> (SO)
G29 = alkyl<(1-19)> (SO (1-) G30) / CHO / alkylcarbonyl<(1-6)> (SO (1-) F) / 293 / NH2 (SO) / 625 / 540 / 301 / 313 / SH / 314 / 316 / 319 / 321 / Ph (SO) / naphthyl (SO) / biphenylyl (SO) / Hy<EC (4-8) A (1-4) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (1-3)> (SO) / 328 / 330 / 333 / 341 / F / Cl / Br / I



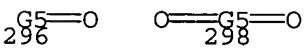




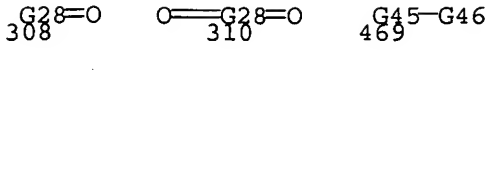
G30 = 286 / F / cycloalkyl<(3-10)> / Ph (SO) / naphthyl (SO) / biphenylyl (SO) / Hy<EC (4-8) A (1-4) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (1-3)> (SO) / 288 / 290

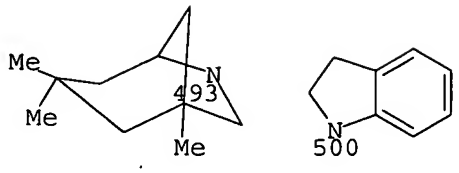


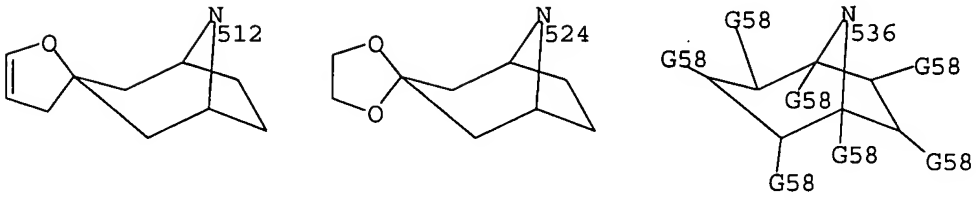
G31 = NULL / alkylene<(1-6)>
G32 = cycloalkyl<(3-10)> / Ph (SO) / naphthyl (SO) / biphenylyl (SO) / Hy<EC (4-8) A (1-4) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (1-3)> (SO) / 296 / 298

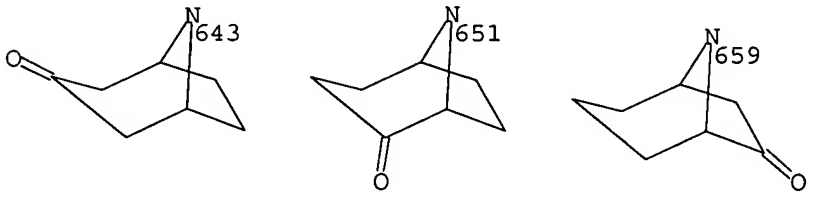


G33 = NH (SO)
G34 = NULL / alkylene<(1-3)>
G35 = NH2 (SO) / Hy<EC (4-8) A (1-4) Q (1-) N (0-) O (0-) S (0) OTHERQ, AN (1-) N, RC (1-3)> (SO) / 308 / 310 / (SC 469 / piperidino (SO (1-) G47) / pyrrolidino / 493 / 500 / 512 / 524 / 536 / 643 / 651 / 659)





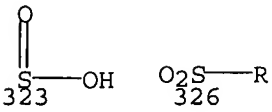




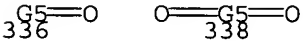
G36 = 304-60 306-307 / SO2

G34—G33—C(O)
304 306

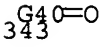
G37 = 323 / 326



G38 = Ph (SO) / naphthyl (SO) / biphenylyl (SO) /
Hy<EC (4-8) A (1-4) Q (0-) N (0-) O (0-) S (0) OTHERQ,
RC (1-3)> (SO) / 336 / 338

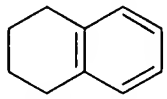


G39 = alkyl<(7-12)> (SO) / 343 /
alkyl<(1-6)> (SO (1-) F) / alkenyl<(2-12)> /
cycloalkyl<(3-10)>

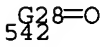


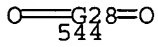
G40 = Ak<EC (7-12) C, BD (ALL) SE> (SO)
G41 = (1-5) CH2 (SO)
G42 = (0-4) CH2 (SO)
G43 = O / S / NH (SO)
G44 = (2-6) CH2 (SO)
G45 = NH / NMe
G46 = alkyl<(5-8)> / 472 / 484 / cyclobutyl / cyclopentyl / cyclohexyl / Ph (SO (1-) F)

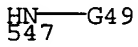

472

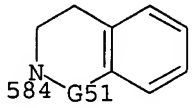

484

G47 = Me / Ph
G48 = NH2 (SO) / Hy<EC (4-8) A (1-4) Q (1-) N (0-) O (0-) S (0) OTHERQ, AN (1-) N, RC (1-3)> (SO) / 542 / 544 / (SC 547 / piperidino (SO (1-) G47) / pyrrolidino / hexahydroazepino / 584)

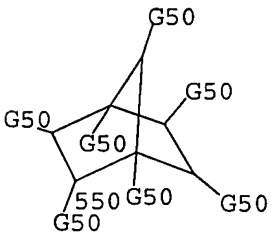

542

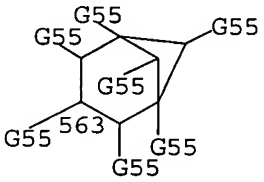

544


547

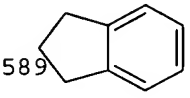

584

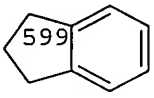
G49 = cyclopentyl (SO (1-) CH2OH) / 550 / 563

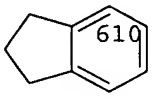

550

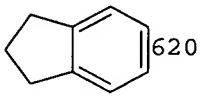

563

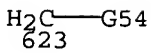
G50 = H / CH2OH / Me
G51 = (0-1) CH2
G52 = R / (SC Ph (SO (1-) G53) / 589 / 599 / 610 / 620 / 623)


589

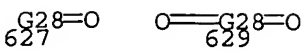

599


610


620

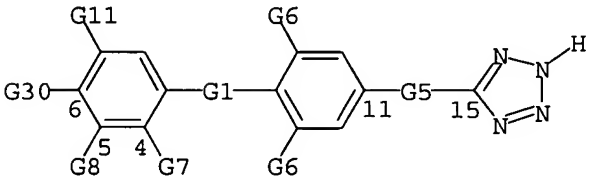

623

G53 = Me / Et
G54 = cycloalkyl<(4-6)>
G55 = H / Me
G56 = alkylene<(1-3)>
G57 = NH2 (SO) / Hy<EC (4-8) A (1-4) Q (1-) N (0-) O (0-) S (0) OTHERQ, AN (1-) N, RC (1-3)> (SO) / 627 / 629

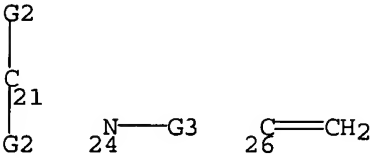


G58 = H / OH
MPL: claim 4
NTE: or pharmaceutically acceptable salts or prodrugs
NTE: additional ring formation also claimed
NTE: substitution is restricted
STE: and isomers

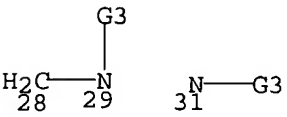
MSTR 4



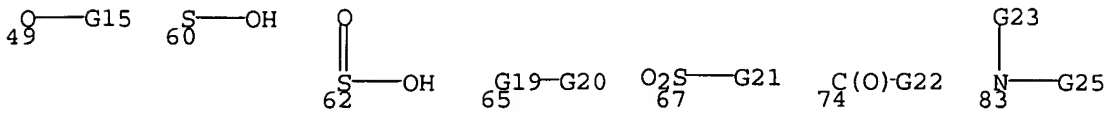
G1 = O / S / S(O) / SO2 / 21 / C(O) / CHOH / 24 / 26

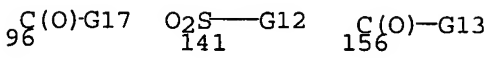


G2 = H / F
G3 = H / alkyl<(1-6)> (SO G4)
G4 = cycloalkyl<(3-6)> / OMe
G5 = O / CH2 / CH2CH2 / S / S(O) / SO2 / 28-11 29-15 / 31 / NULL



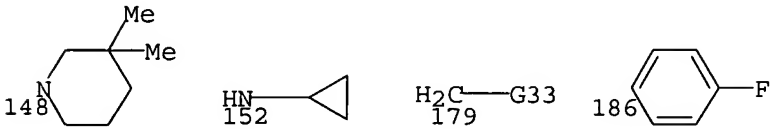
G6 = H / F / Cl / Br / I / alkyl<(1-8)> / CF3 / OCF3 / alkoxy<(1-8)> / CN / (SC Me)
G7 = H / F / Cl / Br / I / alkyl<(1-8)> / CF3 / OCF3 / alkoxy<(1-8)> / CN
G8 = H / alkyl<(1-12)> (SO) / alkenyl<(2-12)> / alkynyl<(2-12)> / F / Cl / Br / I / CN / OH / 49 / SH / 60 / 62 / 65 / aryl / heteroaryl<EC (0-) O (0-) N (0-) S (0-) P (0) OTHERQ> / cycloalkyl<(3-10)> / Hy<EC (0-) O (0-) N (0-) S (0-) P (0) OTHERQ, AR (0), BD (ALL) SE> / 67 / 74 / 83 / 96 / (SC Ph (SO) / naphthyl (SO) / Pr-i / 141 / 156)



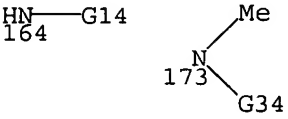


G11 = H / F / Cl / Br / I / alkyl<(1-8)> / CF3 / OCF3 / alkoxy<(1-8)> / CN

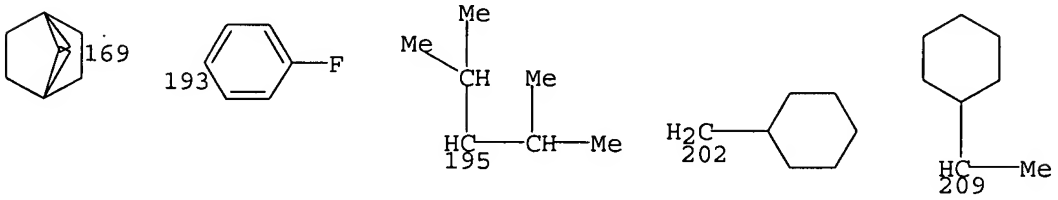
G12 = pyrrolidino / piperidino / 148 / 152 / NMe2 / 179 / 186



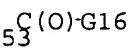
G13 = piperidino / 164 / pyrrolidino / 173



G14 = cyclobutyl / cyclohexyl / 169 / Me / Bu-n / Pr-i / heptyl / nonyl / 193 / cyclopentyl / cycloheptyl / cyclooctyl / 195 / 202 / 209

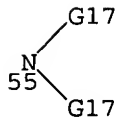


G15 = alkyl<(1-12)> (SO) / aryl / heteroaryl<EC (0-) O (0-) N (0-) S (0-) P (0) OTHERQ> / cycloalkyl<(3-10)> / Hy<EC (0-) O (0-) N (0-) S (0-) P (0) OTHERQ, AR (0), BD (ALL) SE> / 53

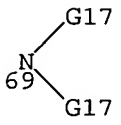


G16 = 55 / Hy<EC (3-10) A (1-) N (0-) O (0-) S (0) OTHERQ, AN (1-) N> (SO) / H / alkyl<(1-10)> (SO) / alkenyl<(2-10)> / alkoxy<(2-10)> / cycloalkyl<(3-10)> / Hy<EC (0-) O (0-) N (0-) S (0-) P (0) OTHERQ, AR (0), BD (ALL) SE> / aryl / heteroaryl<EC (0-) O (0-) N (0-) S (0-)

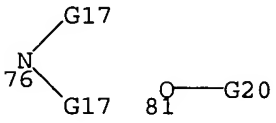
P (0) OTHERQ>



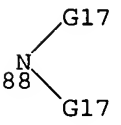
G17 = H / alkyl<(1-12)> (SO) / alkenyl<(2-12)> (SO) / alkynyl<(2-12)> / aryl / heteroaryl<EC (0-) O (0-) N (0-) S (0-) P (0) OTHERQ> / cycloalkyl<(3-10)> / Hy<EC (0-) O (0-) N (0-) S (0-) P (0) OTHERQ, BD (ALL) SE>
G19 = S / S(O) / SO2
G20 = alkyl<(1-12)> (SO) / alkenyl<(2-12)> / alkynyl<(2-12)> / aryl / heteroaryl<EC (0-) O (0-) N (0-) S (0-) P (0) OTHERQ> / cycloalkyl<(3-10)> / Hy<EC (0-) O (0-) N (0-) S (0-) P (0) OTHERQ, AR (0), BD (ALL) SE>
G21 = 69 / Hy<EC (1-) N (0-) O (0-) S (0) OTHERQ, AN (1-) N> (SO)



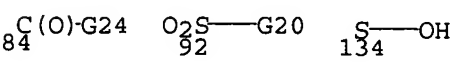
G22 = 76 / Hy<EC (1-) N (0-) O (0-) S (0) OTHERQ, AN (1-) N> (SO) / 81 / OH



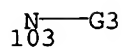
G23 = H / alkyl<(1-6)> (SO (1-) G4)
G24 = alkyl<(1-12)> (SO) / alkenyl<(2-12)> / alkynyl<(2-12)> / aryl / heteroaryl<EC (0-) O (0-) N (0-) S (0-) P (0) OTHERQ> / cycloalkyl<(3-10)> / Hy<EC (0-) O (0-) N (0-) S (0-) P (0) OTHERQ, AR (0), BD (ALL) SE> / 88 / Hy<EC (1-) N (0-) O (0-) S (0) OTHERQ, AN (1-) N> (SO)



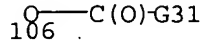
G25 = 84 / 92 / 134 / H / alkyl<(1-12)> (SO) / alkenyl<(2-12)> / alkynyl<(2-12)> / aryl / heteroaryl<EC (0-) O (0-) N (0-) S (0-) P (0) OTHERQ> / cycloalkyl<(3-10)> / Hy<EC (0-) O (0-) N (0-) S (0-) P (0) OTHERQ, AR (0), BD (ALL) SE>



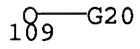
G26 = (3-7) CH2 (SO)
G27 = O / S / 103



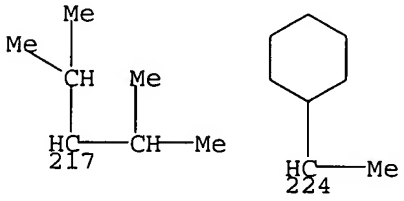
G28 = (2-6) CH2 (SO)
G29 = (1-5) CH2 (SO)
G30 = OH / alkoxy<(1-6)> / 106 / F



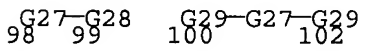
G31 = H / alkyl<(1-10)> (SO) / alkenyl<(2-10)> / alkoxy<(2-10)> / cycloalkyl<(3-10)> / Hy<EC (0-) O (0-) N (0-) S (0-) P (0) OTHERQ, AR (0), BD (ALL) SE> / aryl / heteroaryl<EC (0-) O (0-) N (0-) S (0-) P (0) OTHERQ> / OH / 109



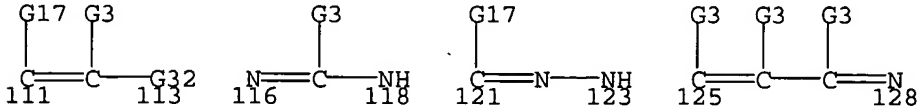
G32 = NH / O / S
G33 = cyclopropyl / cyclobutyl / cyclopentyl / cyclohexyl
G34 = cyclobutyl / cyclopentyl / cyclohexyl / cycloheptyl / cyclooctyl / 217 / 224



G7 +G8 = G26 / 98-4 99-5 / 100-4 102-5



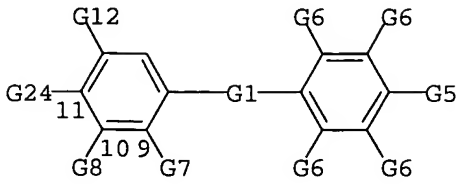
G8 +G30= 111-5 113-6 / 116-5 118-6 / 121-5 123-6 / 125-5 128-6



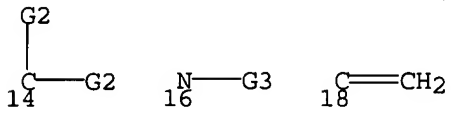
MPL: claim 4
NTE: pharmaceutically acceptable salts or prodrugs
NTE: substitution is restricted
NTE: additional oxo substitution also disclosed

STE: stereoisomers

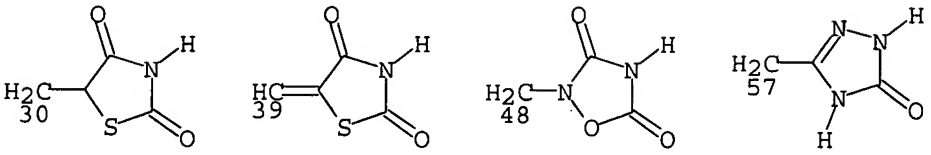
MSTR 5

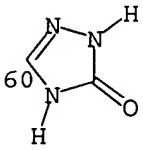


G1 = **O** / S / S(O) / SO2 / 14 / C(O) / CHOH / NH / 16 / 18

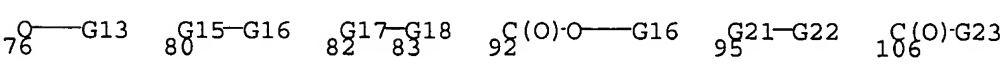


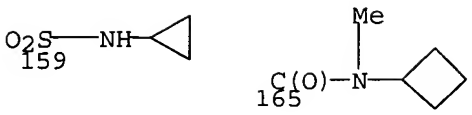
G2 = H / F
G3 = alkyl<(1-6)> (SO (1) G4)
G4 = cycloalkyl<(3-6)> / OMe
G5 = **30** / 39 / 48 / 57 / 60





G6 = (2-) H / F / Cl / Br / I / alkyl<(1-8)> / **CF3** / OCF3 / alkoxy<(1-8)> / CN / (SC Me)
G7 = H / F / Cl / Br / I / alkyl<(1-8)> / CF3 / OCF3 / alkoxy<(1-8)> / CN
G8 = H / alkyl<(1-8)> (SO) / alkenyl<(2-12)> / alkynyl<(2-12)> / F / Cl / Br / I / CN / OH / 76 / 82 / 80 / Ph (SO) / naphthyl (SO) / heteroaryl<EC (1-3) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (1-2)> (SO) / Cb<EC (3-10) C, AR (0), BD (0-) D> (SO) / Hy<EC (5-9) A (1-3) Q (0-) N (0-) O (0-) S (0) OTHERQ, AR (0), BD (0-) D, RC (1-2)> (SO) / CO2H / 92 / 95 / 106 / (SC Pr-i / 159 / 165)





G9 = (3-6) CH2 (SO)
G10 = (0-5) CH2 (SO)
G11 = O / S
G12 = H / F / Cl / Br / I / alkyl<(1-8)> / CF3 / OCF3 / alkoxy<(1-8)> / CN
G13 = alkyl<(1-12)> (SO) / Ph (SO) / naphthyl (SO) / heteroaryl<EC (1-3) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (1-2)> (SO) / Cb<EC (3-10) C, AR (0), BD (0-) D> (SO) / Hy<EC (5-9) A (1-3) Q (0-) N (0-) O (0-) S (0) OTHERQ, AR (0), BD (0-) D, RC (1-2)> (SO) / 78

78 C(O)-G14

G14 = alkyl<(1-10)> (SO) / alkenyl<(2-12)> / alkynyl<(2-10)> / Cb<EC (3-10) C, AR (0), BD (0-) D> (SO) / Ph (SO) / naphthyl (SO) / heteroaryl<EC (1-3) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (1-2)> (SO) / Hy<EC (5-9) A (1-3) Q (0-) N (0-) O (0-) S (0) OTHERQ, AR (0), BD (0-) D, RC (1-2)> (SO)
G15 = S / S(O) / SO2
G16 = alkyl<(1-12)> (SO) / alkenyl<(2-12)> / alkynyl<(2-12)> / Ph (SO) / naphthyl (SO) / heteroaryl<EC (1-3) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (1-2)> (SO) / Cb<EC (3-10) C, AR (0), BD (0-) D> (SO) / Hy<EC (5-9) A (1-3) Q (0-) N (0-) O (0-) S (0) OTHERQ, AR (0), BD (0-) D, RC (1-2)> (SO)
G17 = 84-10 85-83 / SO2 / C(O)

84 G20-C(O) 85

G18 = NH2 / 86 / Hy<EC (3-10) A (1-2) Q (1-) N (0-) O (0-) S (0) OTHERQ, AN (1-) N> (SO)

86 G19-G16

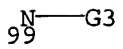
G19 = NH / 88

88 N-G16

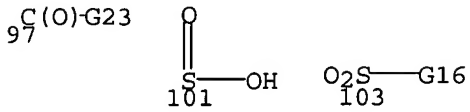
G20 = O / NH / 90

90 N-G3

G21 = NH / 99

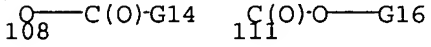


G22 = 97 / 101 / 103



G23 = H / alkyl<(1-12)> (SO) / alkenyl<(2-12)> /
alkynyl<(2-12)> / Ph (SO) / naphthyl (SO) /
heteroaryl<EC (1-3) Q (0-) N (0-) O (0-) S (0) OTHERQ,
RC (1-2)> (SO) / Cb<EC (3-10) C, AR (0), BD (0-) D> (SO) /
Hy<EC (5-9) A (1-3) Q (0-) N (0-) O (0-) S (0) OTHERQ,
AR (0), BD (0-) D, RC (1-2)> (SO)

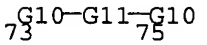
G24 = OH / alkoxy<(1-6)> / 108 / F / CO2H / 111 / (SC OMe)



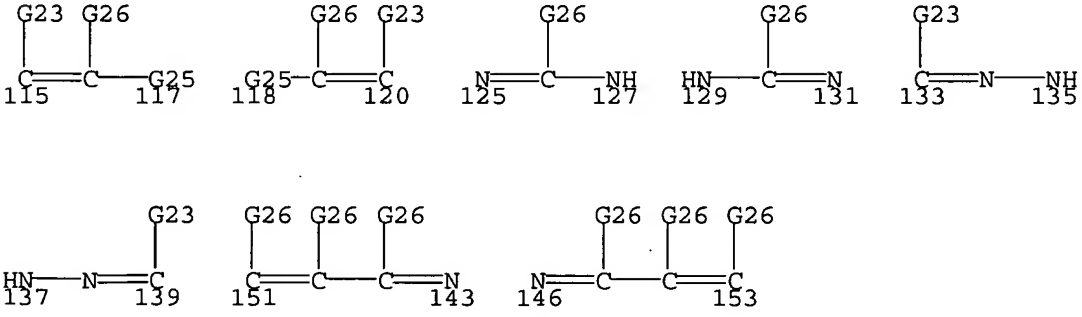
G25 = NH / O / S

G26 = H / alkyl<(1-6)> (SO (1) G4)

G7 +G8 = G9 / 73-9 75-10

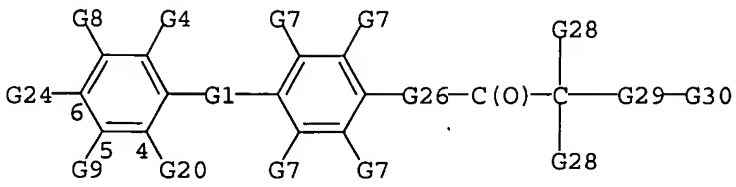


G8 +G24= 115-10 117-11 / 118-10 120-11 / 125-10 127-11 /
129-10 131-11 / 133-10 135-11 / 137-10 139-11 /
151-10 143-11 / 146-10 153-11

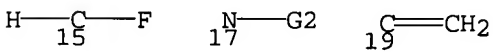


MPL: claim 4
NTE: and prodrugs and pharmaceutically acceptable salts
NTE: substitution is restricted
NTE: additional oxo substitution also claimed
STE: and stereoisomers

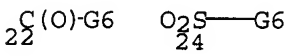
MSTR 6



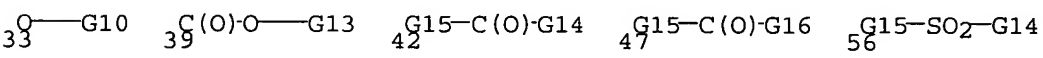
G1 = O / S / S(O) / SO2 / CH2 / CF2 / 15 / C(O) / CHOH / NH / 17 / 19

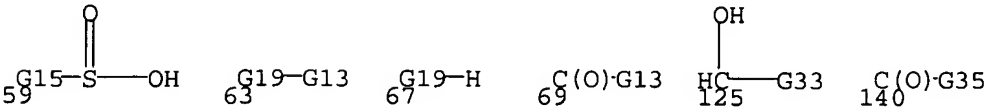


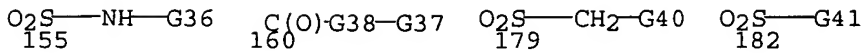
G2 = alkyl<(1-6)> (SO G3)
G3 = Cb<EC (3-6) C, AR (0), BD (0-) D (0-) T> (SO) / OMe
G4 = H / alkyl<(1-6)> (SO (1) G5) / 22 / 24 / F / Cl / Br / I



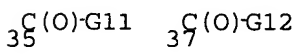
G5 = Cb<EC (3-6) C, AR (0), BD (0-) D (0-) T> (SO) / Hy<EC (4-10) A (1-3) Q (0-) O (0-) N (0-) S (0) OTHERQ, AR (0), RC (1-2)> (SO) / Ph (SO)
G6 = alkyl<(1-6)> (SO (1) G5) / Ph (SO) / Cb<EC (3-6) C, AR (0), BD (0-) D (0-) T> (SO) / Hy<EC (4-10) A (1-3) Q (0-) O (0-) N (0-) S (0) OTHERQ, AR (0), RC (1-2)> (SO)
G7 = (2-) H / F / Cl / Br / I / alkyl<(1-8)> / CF3 / OCF3 / alkoxy<(1-8)> / CN / (SC Me)
G8 = H / F / Cl / Br / I / alkyl<(1-8)> / CF3 / OCF3 / alkoxy<(1-8)> / CN
G9 = alkyl<(1-12)> (SO) / alkenyl<(2-12)> / alkynyl<(2-12)> / F / Cl / Br / I / CN / OH / 33 / aryl (SO) / heteroaryl (SO) / Cb<EC (3-10) C, AR (0), BD (0-) D (0-) T> (SO) / Hy<EC (4-10) A (1-3) Q (0-) O (0-) N (0-) S (0) OTHERQ, AR (0), RC (1-2)> (SO) / CO2H / 39 / 42 / 47 / 56 / 59 / NH2 / 63 / 67 / CHO / 69 / (SC 125 / 140 / 155 / 160 / 179 / 182)







G10 = alkyl<(1-12)> (SO) / aryl (SO) / heteroaryl (SO) / Cb<EC (3-10) C, AR (0), BD (0-) D (0-) T> (SO) / Hy<EC (4-10) A (1-3) Q (0-) O (0-) N (0-) S (0) OTHERQ, AR (0), RC (1-2)> (SO) / 35 / 37



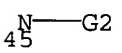
G11 = NH2 (SO) / Cb<EC (3-10) C, AR (0), BD (0-) D (0-) T> (SO) / aryl (SO) / heteroaryl (SO) / Hy<EC (4-10) A (1-3) Q (0-) O (0-) N (0-) S (0) OTHERQ, AR (0), RC (1-2)> (SO)

G12 = alkyl<(1-10)> (SO) / alkenyl<(2-10)> / alkynyl<(2-10)>

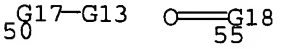
G13 = alkyl<(1-12)> (SO) / alkenyl<(2-12)> / alkynyl<(2-12)> / aryl (SO) / heteroaryl (SO) / Cb<EC (3-10) C, AR (0), BD (0-) D (0-) T> (SO) / Hy<EC (4-10) A (1-3) Q (0-) O (0-) N (0-) S (0) OTHERQ, AR (0), RC (1-2)> (SO)

G14 = H / alkyl<(1-12)> (SO) / alkenyl<(2-12)> / alkynyl<(2-12)> / aryl (SO) / heteroaryl (SO) / Cb<EC (3-10) C, AR (0), BD (0-) D (0-) T> (SO) / Hy<EC (4-10) A (1-3) Q (0-) O (0-) N (0-) S (0) OTHERQ, AR (0), RC (1-2)> (SO)

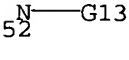
G15 = NH / 45



G16 = NH2 / 50 / Hy<EC (3-10) A (1-2) Q (1-) N (0-) O (0-) S (0) OTHERQ, AN (1-) N> (SO) / 55

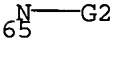


G17 = NH / 52



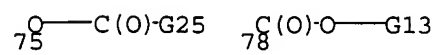
G18 = Hy<EC (3-10) A (1-2) Q (1-) N (0-) O (0-) S (0) OTHERQ, AN (1-) N> (SO)

G19 = NH / 65

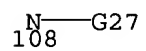


G20 = H / F / Cl / Br / I / alkyl<(1-8)> / CF3 / OCF3 / alkoxy<(1-8)> / CN

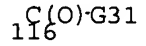
G21 = (3-6) CH2
G22 = (0-5) CH2
G23 = O / S / NH (SO)
G24 = OH / alkoxy<(1-6)> / 75 / F / CO2H / 78



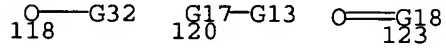
G25 = alkyl<(1-10)> (SO) / alkenyl<(2-10)> / alkynyl<(2-10)> / Cb<EC (3-10) C, AR (0), BD (0-) D (0-) T> (SO) / aryl (SO) / heteroaryl (SO) / Hy<EC (4-10) A (1-3) Q (0-) O (0-) N (0-) S (0) OTHERQ, AR (0), RC (1-2)> (SO)
G26 = NH / 108



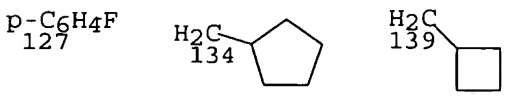
G27 = alkyl<(1-8)> / (SC Me)
G28 = H / alkyl<(1-6)> / R / (SC Me)
G29 = NULL / CH2
G30 = OH / 116



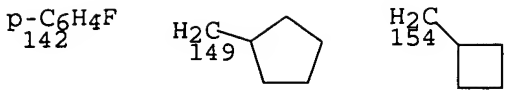
G31 = OH / 118 / NH2 / 120 / Hy<EC (3-10) A (1-2) Q (1-) N (0-) O (0-) S (0) OTHERQ, AN (1-) N> (SO) / 123 / (SC OMe / OEt)



G32 = alkyl<(1-10)> (SO) / alkenyl<(2-10)> / alkynyl<(2-10)> / Cb<EC (3-10) C, AR (0), BD (0-) D (0-) T> (SO) / aryl (SO) / heteroaryl (SO) / Hy<EC (4-10) A (1-3) Q (0-) O (0-) N (0-) S (0) OTHERQ, AR (0), RC (1-2)> (SO)
G33 = aryl (SO) / heteroaryl (SO) / Cb<EC (3-8) C, AR (0), BD (0-) D (0-) T> (SO) / alkyl<(1-2)> (SR G34) / Hy<EC (4-10) A (1-3) Q (0-) O (0-) N (0-) S (0) OTHERQ, AR (0), RC (1-2)> (SO) / (SC 127 / 134 / 139 / cyclopentyl / cyclobutyl)

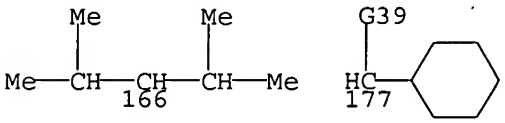


G34 = Cb<EC (3-8) C, AR (0), BD (0-) D (0-) T> (SO) / Hy<EC (4-10) A (1-3) Q (0-) O (0-) N (0-) S (0) OTHERQ, AR (0), RC (1-2)> (SO)
G35 = 142 / 149 / 154 / cyclobutyl / cyclopentyl

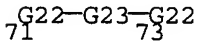


G36 = cyclopropyl / cyclobutyl / cyclopentyl / cyclohexyl / alkyl<(1-8)> / Ph (SO F) / Pr-i / Bu-n / heptyl / 158

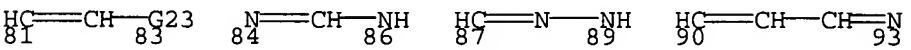
G37 = Cb<EC (3-8) C, AR (0), BD (0-) D (0-) T> (SO) / 166 / Pr-i / 177 / Ph (SO F) / cyclobutyl / cyclopentyl / cyclohexyl / cycloheptyl

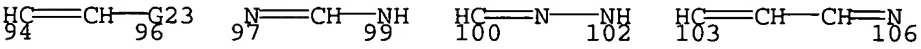


G38 = NH / NMe
G39 = H / Me
G40 = cyclopropyl / cyclobutyl / cyclopentyl / cyclohexyl
G41 = cyclopentyl / cyclohexyl
G9 +G20= G21 / 71-5 73-4



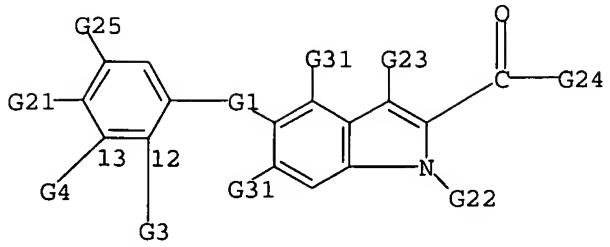
G9 +G24= 81-5 83-6 / 84-5 86-6 / 87-5 89-6 / 90-5 93-6 / 96-5 94-6 / 99-5 97-6 / 102-5 100-6 / 106-5 103-6



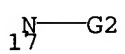


MPL: claim 4
NTE: or prodrugs or pharmaceutically acceptable salts
STE: or isomers

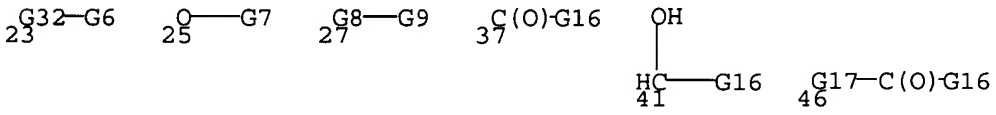
MSTR 7

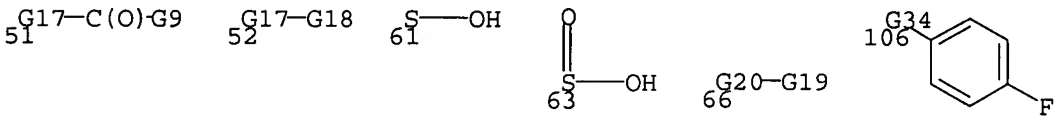


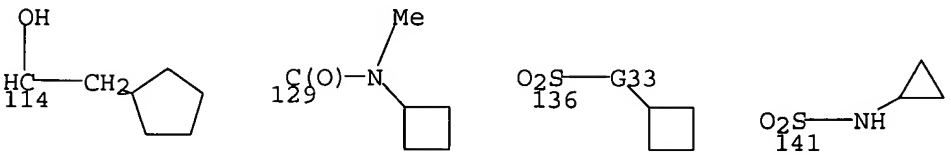
G1 = O / CH2 / CF2 / NH / 17 / S / S(O) / SO2

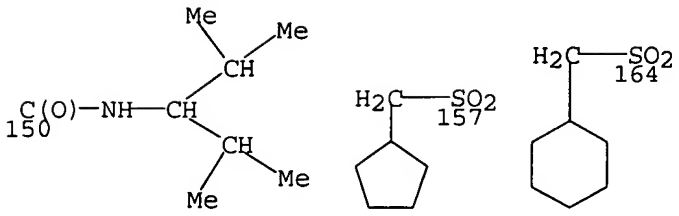


G2 = alkyl<(1-6)> (SO)
G3 = H / F / Cl / Br / I / CN / CF3 / OCF3 / alkyl<(1-6)> (SO) / (SC Me)
G4 = H / F / Cl / Br / I / CN / alkyl<(1-12)> (SO) / alkenyl<(2-12)> (SO) / alkynyl<(2-12)> (SO) / Cb<EC (3-10) C, AR (0), BD (0-) D (0-) T> (SO) / 23 / aryl<(6-10)> (SO) / heteroaryl<EC (0-) N (0-) O (0-) S (0-) P (0) OTHERQ (2-9) C> (SO) / Hy<EC (0-) N (0-) O (0-) S (0-) P (0) OTHERQ (2-9) C, AR (0), BD (0-) D (0-) T> (SO) / OH / 25 / 27 / 37 / 41 / 46 / 51 / 52 / SH / 61 / 63 / 66 / (SC 106 / 114 / 129 / 136 / 141 / 150 / 157 / 164 / Me)









G5 = alkylene<(1-6)> (SO)
G6 = Cb<EC (3-10) C, AR (0), BD (0-) D (0-) T> (SO) / aryl<(6-10)> (SO) / heteroaryl<EC (0-) N (0-) O (0-) S (0-) P (0) OTHERQ (2-9) C> (SO) / Hy<EC (0-) N (0-) O (0-) S (0-) P (0) OTHERQ (2-9) C, AR (0), BD (0-) D (0-) T> (SO)
G7 = alkyl<(1-12)> (SO) / Cb<EC (3-10) C, AR (0), BD (0-) D (0-) T> (SO) / aryl<(6-10)> (SO) / heteroaryl<EC (0-) N (0-) O (0-) S (0-) P (0) OTHERQ (2-9) C> (SO) / Hy<EC (0-) N (0-) O (0-) S (0-) P (0) OTHERQ (2-9) C, AR (0), BD (0-) D (0-) T> (SO)
G8 = C(O) / SO2
G9 = NH2 / 29 / Hy<EC (3-10) A (1-2) Q (1-2) N (0-1) O (0-1) S (0) OTHERQ, AN (1-) N> (SO G14)

G10—G11
29

G10 = NH / 31

N——G12
31

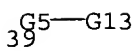
G11 = alkyl<(1-12)> (SO) / alkenyl<(2-12)> (SO) / alkynyl<(2-12)> (SO) / Cb<EC (3-10) C, AR (0), BD (0-) D (0-) T> (SO) / 35 / aryl<(6-10)> (SO (1-) G15) / heteroaryl<EC (0-) N (0-) O (0-) S (0-) P (0) OTHERQ (2-9) C> (SO)

G5—G13
35

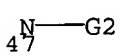
G12 = alkyl<(1-6)> (SO) / Cb<EC (3-10) C, AR (0), BD (0-) D (0-) T> (SO) / 33

G5—G13
33

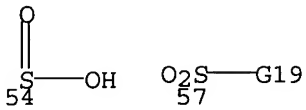
G13 = Cb<EC (3-9) C, AR (0), BD (0-) D (0-) T> (SO)
G14 = R / alkyl<(1-6)> (SO)
G15 = R / F / Cl / Br / I
G16 = H / alkyl<(1-12)> (SO) / alkenyl<(2-12)> (SO) / alkynyl<(2-12)> (SO) / Cb<EC (3-10) C, AR (0), BD (0-) D (0-) T> (SO) / 39 / aryl<(6-10)> (SO (1-) G15) / heteroaryl<EC (0-) N (0-) O (0-) S (0-) P (0) OTHERQ (2-9) C> (SO)



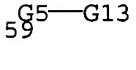
G17 = NH / 47



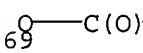
G18 = 54 / 57



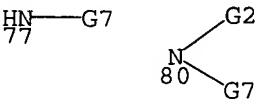
G19 = alkyl<(1-12)> (SO) / alkenyl<(2-12)> (SO) / alkynyl<(2-12)> (SO) / Cb<EC (3-10) C, AR (0), BD (0-) D (0-) T> (SO) / 59 / aryl<(6-10)> (SO (1-) G15) / heteroaryl<EC (0-) N (0-) O (0-) S (0-) P (0) OTHERQ (2-9) C> (SO)



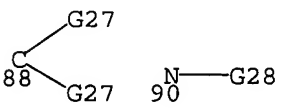
G20 = S / S(O) / SO2
G21 = OH / F / alkoxy<(1-4)> (SO) / 69



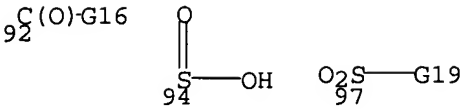
G22 = H / COMe / alkyl<(1-6)> (SO) / (SC Me)
G23 = H / alkyl<(1-6)> (SO) / (SC Me)
G24 = OH / alkoxy<(1-6)> (SO) / NH2 / 77 / 80



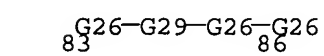
G25 = H / F / Cl / Br / I / alkyl<(1-6)> (SO) / (SC Me / Pr-i / Bu-s)
G26 = 88 / 90 / O / S



G27 = H / alkyl<(1-6)> (SO)
G28 = H / alkyl<(1-6)> (SO) / 92 / 94 / 97



G29 = R<TX "group to form ring"> / NULL
G31 = H / F / Cl / Br / I / CN / CF3 / OCF3 / alkyl<(1-6)> (SO) / (SC Me)
G32 = alkylene<(1-6)> (SO) / (SC CH2)
G33 = CH2 / NH
G34 = CHOH / C(O) / SO2 / CH2
G3 +G4 = 86-12 83-13 / (SC CH2CH2CH2CH2)



MPL: claim 4
NTE: or pharmaceutically acceptable salts

L28 ANSWER 4 OF 10 MARPAT COPYRIGHT 2005 ACS on STN
AN 139:276885 MARPAT
TI Preparation of novel heterocyclic analogs of diphenylethylene compounds as antidiabetics
IN Neogi, Partha; Dey, Debendranath; Medicherla, Satyanarayana; Nag, Bishwajit; Lee, Arthur
PA USA
SO U.S. Pat. Appl. Publ., 66 pp., Cont.-in-part of U.S. Ser. No. 843,167.
CODEN: USXXCO
DT Patent
LA English
IC ICM A61K031-426
ICS A61K031-421; A61K031-4168; A61K031-381; A61K031-365; C07D339-02; C07D263-44; C07D277-14
NCL 514369000
CC 28-7 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1, 63
FAN.CNT 9

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003181494	A1	20030925	US 2002-265902	20021008
	US 2002025975	A1	20020228	US 2001-785554	20010220
	US 2002032225	A1	20020314	US 2001-843167	20010427
	WO 2004033438	A1	20040422	WO 2003-US31803	20031008

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI US 1999-287237 19990406
US 2000-591105 20000609
US 2001-785554 20010220

US 2001-843167 20010427
US 1998-74925 19980508
US 2002-265902 20021008

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. [I; Z = II-IV; n, m, q and r = 0-4 (n+m ≤ 4 and q+r ≤ 4); p, s = 0-5 (p+s ≤ 5); R, R2 = H, alkyl, alkenyl, etc.; R1 = H, alkyl, alkenyl, etc.; A, A1, A2 = H, acylamino, acyloxy, alkanoyl, etc.; B, B1, B2 = H, acylamino, acyloxy, alkanoyl, etc.; or A and B together, or A1 and B1 together, or A2 and B2 together, may be joined to form a methylenedioxy or ethylenedioxy; X, X1 = (un)substituted NH, O, S] which are effective in lowering blood glucose level, serum insulin, triglyceride and free fatty acid levels in animal models of Type II diabetes, were prepared E.g., a multi-step synthesis of V, starting from 3,5-dimethoxybenzaldehyde and 4-hydroxyphenylacetic acid, was given. The compound V showed strong glucose lowering activity even though it is a weak PPAR-γ agonist (data given). The compds. I are disclosed as useful for a variety of treatments including the treatment of inflammation, inflammatory and immunol. diseases, insulin resistance, hyperlipidemia, coronary artery disease, cancer and multiple sclerosis. Pharmaceutical composition comprising the compound I was claimed.

ST heterocyclic analog diphenylethylene prepn antidiabetic cytokine cyclooxygenase inhibitor; thiazolidinedione oxazolidinedione diphenylethylene prepn antiinflammatory immunomodulator hypolipemic antitumor; insulin resistance thiazolidinedione oxazolidinedione diphenylethylene prepn; multiple sclerosis thiazolidinedione oxazolidinedione diphenylethylene prepn

IT Apolipoproteins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(A-I, co-drugs; preparation of diphenylethylene compds. containing thiazolidinedione or oxazolidinedione moieties for treating diabetes, inflammatory or immunol. disease in combination with other agents)

IT Proteins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(bile acid-binding, co-drugs; preparation of diphenylethylene compds. containing thiazolidinedione or oxazolidinedione moieties for treating diabetes, inflammatory or immunol. disease in combination with other agents)

IT Sulfonylureas
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(co-drug; preparation of diphenylethylene compds. containing thiazolidinedione or oxazolidinedione moieties for treating diabetes, inflammatory or immunol. disease in combination with other agents)

IT Immunosuppressants
Narcotics
(co-drugs; preparation of diphenylethylene compds. containing thiazolidinedione or oxazolidinedione moieties for treating diabetes, inflammatory or immunol. disease in combination with other agents)

IT Corticosteroids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(co-drugs; preparation of diphenylethylene compds. containing thiazolidinedione

or oxazolidinedione moieties for treating diabetes, inflammatory or immunol. disease in combination with other agents)

IT Artery, disease
(coronary, treatment of; preparation of diphenylethylene compds. containing thiazolidinedione or oxazolidinedione moieties for treating diabetes, inflammatory or immunol. disease in combination with other agents)

IT Cytokines
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(cytokines inhibitors as co-drugs; preparation of diphenylethylene compds. containing thiazolidinedione or oxazolidinedione moieties for treating diabetes, inflammatory or immunol. disease in combination with other agents)

IT Antirheumatic agents
(disease-modifying, co-drugs; preparation of diphenylethylene compds. containing
thiazolidinedione or oxazolidinedione moieties for treating diabetes, inflammatory or immunol. disease in combination with other agents)

IT Immunity
(disorder, treatment of; preparation of diphenylethylene compds. containing thiazolidinedione or oxazolidinedione moieties for treating diabetes, inflammatory or immunol. disease in combination with other agents)

IT Lipids, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(hyperlipidemia, resistance, treatment of; preparation of diphenylethylene compds. containing thiazolidinedione or oxazolidinedione moieties for treating diabetes, inflammatory or immunol. disease in combination with other agents)

IT Anti-inflammatory agents
(nonsteroidal, co-drugs; preparation of diphenylethylene compds. containing thiazolidinedione or oxazolidinedione moieties for treating diabetes, inflammatory or immunol. disease in combination with other agents)

IT Interleukin 1
Interleukin 6
Tumor necrosis factors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(preparation of diphenylethylene compds. containing thiazolidinedione or oxazolidinedione moieties for inhibiting activity of TNF-α, IL-1, IL-6 or COX-2)

IT Anti-inflammatory agents
Antidiabetic agents
Antitumor agents
Cardiovascular agents
Human
Hypolipemic agents
Immunomodulators
(preparation of diphenylethylene compds. containing thiazolidinedione or oxazolidinedione moieties for treating diabetes, inflammatory or immunol. disease in combination with other agents)

IT Diabetes mellitus
Inflammation
Multiple sclerosis
Neoplasm
(treatment of; preparation of diphenylethylene compds. containing thiazolidinedione or oxazolidinedione moieties for treating diabetes, inflammatory or immunol. disease in combination with other agents)

IT Peroxisome proliferator-activated receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(α, PPAR-α agonists as co-drugs; preparation of diphenylethylene compds. containing thiazolidinedione or oxazolidinedione moieties for

treating diabetes, inflammatory or immunol. disease in combination with other agents)

IT Peroxisome proliferator-activated receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(γ, PPAR-γ agonists as co-drugs; preparation of diphenylethylene compds. containing thiazolidinedione or oxazolidinedione moieties for treating diabetes, inflammatory or immunol. disease in combination with other agents)

IT 329900-75-6, COX-2
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(COX-2; preparation of diphenylethylene compds. containing thiazolidinedione or oxazolidinedione moieties for inhibiting activity of TNF-α, IL-1, IL-6 or COX-2)

IT 59-67-6, Niacin, biological studies 23288-49-5, Probucol
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(co-drug; preparation of diphenylethylene compds. containing thiazolidinedione or oxazolidinedione moieties for treating diabetes, inflammatory or immunol. disease in combination with other agents)

IT 56-03-1D, Biguanide, derivs.
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(co-drugs; preparation of diphenylethylene compds. containing thiazolidinedione or oxazolidinedione moieties for treating diabetes, inflammatory or immunol. disease in combination with other agents)

IT 9028-35-7
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(inhibitors, statins, co-drugs; preparation of diphenylethylene compds. containing thiazolidinedione or oxazolidinedione moieties for treating diabetes, inflammatory or immunol. disease in combination with other agents)

IT 380881-51-6P 606932-84-7P 606932-88-1P 606932-92-7P 606932-93-8P 606932-96-1P 606932-97-2P 606932-99-4P 606933-02-2P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of diphenylethylene compds. containing thiazolidinedione or oxazolidinedione moieties for treating diabetes, inflammatory or immunol. disease in combination with other agents)

IT 380881-49-2P 380881-53-8P 380881-55-0P 606932-68-7P 606932-69-8P 606932-70-1P 606932-71-2P 606932-72-3P 606932-73-4P 606932-74-5P 606932-75-6P 606932-76-7P 606932-77-8P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of diphenylethylene compds. containing thiazolidinedione or oxazolidinedione moieties for treating diabetes, inflammatory or immunol. disease in combination with other agents)

IT 104-87-0, 4-Methylbenzaldehyde 110-91-8, Morpholine, reactions 123-08-0, 4-Hydroxybenzaldehyde 156-38-7, 4-Hydroxyphenylacetic acid 459-57-4, 4-Fluorobenzaldehyde 499-06-9, 3,5-Dimethylbenzoic acid 696-62-8, 4-Iodoanisole 2295-31-0, 2,4-Thiazolidinedione 3462-97-3, 4-Methoxybenzyltriphenylphosphonium chloride 7311-34-4, 3,5-Dimethoxybenzaldehyde 24131-30-4, 3,5-Dimethoxybenzyltriphenylphosphonium bromide 87199-18-6, 3-Hydroxyphenylboronic acid 606933-03-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of diphenylethylene compds. containing thiazolidinedione or oxazolidinedione moieties for treating diabetes, inflammatory or

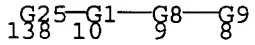
immunol. disease in combination with other agents)

IT 5779-95-3P 33104-27-7P 74772-78-4P 116518-98-0P 154052-92-3P
353227-95-9P 380881-43-6P 380881-45-8P 606932-78-9P 606932-79-0P
606932-80-3P 606932-81-4P 606932-82-5P 606932-83-6P 606932-85-8P
606932-86-9P 606932-87-0P 606932-89-2P 606932-90-5P 606932-91-6P
606932-94-9P 606932-95-0P 606932-98-3P 606933-00-0P 606933-01-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of diphenylethylene compds. containing thiazolidinedione or oxazolidinedione moieties for treating diabetes, inflammatory or immunol. disease in combination with other agents)

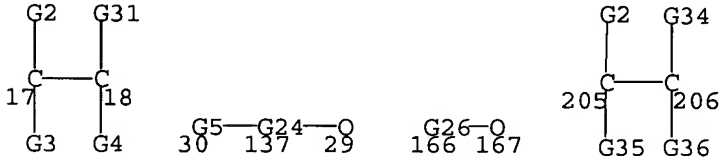
IT 9004-10-8, Insulin, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(resistance, treatment of; preparation of diphenylethylene compds. containing thiazolidinedione or oxazolidinedione moieties for treating diabetes, inflammatory or immunol. disease in combination with other agents)

IT 9001-42-7, α-Glucosidase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(α-glucosidase inhibitors as co-drugs; preparation of diphenylethylene compds. containing thiazolidinedione or oxazolidinedione moieties for treating diabetes, inflammatory or immunol. disease in combination with other agents)

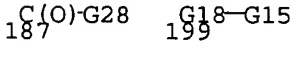
MSTR 1



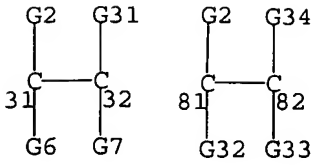
G1 = 17-138 18-9 / 205-138 206-9 / **30-138 29-9** / 166-138 167-9



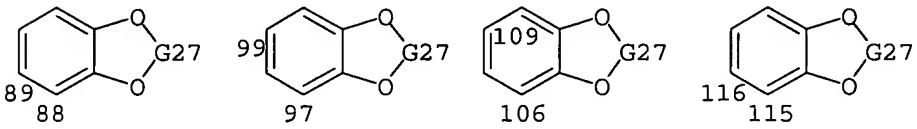
G2 = H / Ak<EC (1-20) C, BD (0-) D (0) T> (SO) / 187 / NH2 / 199 / OH / F / Cl / Br / I

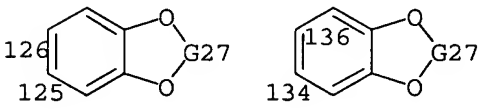


G3 = H
G4 = H
G5 = 31-138 32-137 / 81-138 82-137

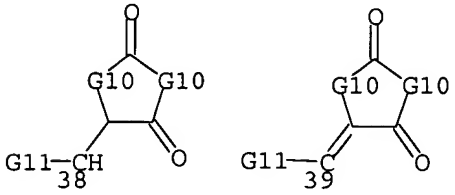


G6 = H
G7 = H
G8 = **phenylene (SO (1-) G23)** / 88-10 89-8 / 97-10 99-8 / 106-10 109-8 / 116-10 115-8 / 125-10 126-8 / 134-10 136-8

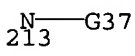




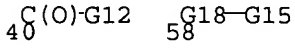
G9 = 39 / **38**



G10 = **213** / O / **S**

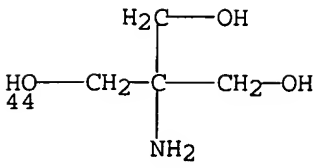


G11 = H / Ak<EC (1-20) C, BD (0-) D (0) T> (SO) / 40 / NH2 / 58 / OH / F / Cl / Br / I



G12 = OH / 42 / 52 / 54

G13 = Na / K / R<TX "other pharmaceutically acceptable counter-ion"> / Ca / Mg / NH3 / 44



44

G14 = R<TX "pharmaceutically acceptable counter-ion", CH (1) +> / tetramethylammonium
G15 = Ak<EC (1-20) C, BD (0-) D (0) T> / 56

G16—G17

56

G16 = (1-6) CH2
G17 = aryl
G18 = NH / 60 / O

N—G15

60

G19 = H / 71 / CHO / alkylcarbonyl<(1-19)> / alkoxycarbonyl<(1-20)> / alkoxy<(1-20)> / alkylamino<(1-20)> / CO2H / CN / F / Cl / Br / I / OH / alkenylcarbonyl<(2-19)> / arylcarbonyl / alkylcarbonyl (SR aryl) / NO2 / Ak<EC (1-20) C, BD (0-) D (0) T> (SO) / (SC OMe / Me)

G20—C(O)-G21

71

G20 = NH / O / 74

N—G22

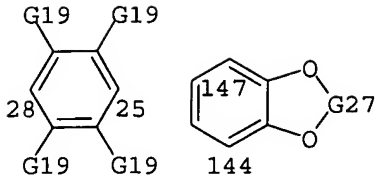
74

G21 = H / Ak<EC (1-20) C, BD (0-) D (0) T>
G22 = Ak<EC (1-20) C, BD (0-) D (0) T>
G23 = 77 / **CHO** / alkylcarbonyl<(1-19)> / alkoxycarbonyl<(1-20)> / alkoxy<(1-20)> / alkylamino<(1-20)> / CO2H / CN / F / Cl / Br / I / OH / alkenylcarbonyl<(2-19)> / arylcarbonyl / alkylcarbonyl (SR aryl) / NO2 / Ak<EC (1-20) C, BD (0-) D (0) T> (SO) / (SC OMe / Me)

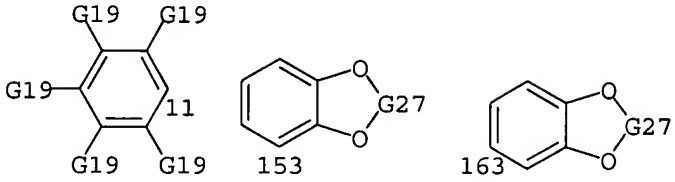
G20—C(O)-G21

77

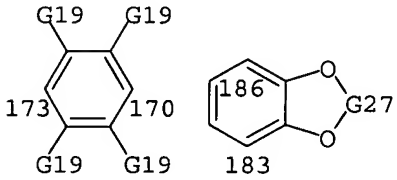
G24 = **28-30 25-29** / 147-30 144-29



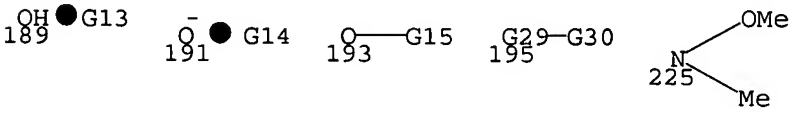
G25 = 11 / 153 / 163



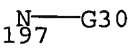
G26 = 173-138 170-167 / 183-138 186-167



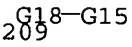
G27 = (1-2) CH2
G28 = OH / 189 / 191 / 193 / NH2 / 195 /
Hy<EC (1-) Q (1-) N, AN (1-) N> / (SC OMe / NMe2 / 225 / morpholino) / (EX piperidino / piperazino)



G29 = NH / 197



G30 = Ak<EC (1-20) C, BD (0-) D (0) T> (SO) /
aryl<(6-10)> (SO)
G31 = H / NH2 / 209 / OH / F / Cl / Br / I



G32 = H
G33 = H
G34 = Ak<EC (1-20) C, BD (0-) D (0) T> (SO) / 211

211 C(O)-G28

G35 = H
G36 = H
G37 = H / Ak<EC (1-20) C, BD (0-) D (0) T> / 215

215 G16—G17

G3 +G4 = NULL
G6 +G7 = NULL
G32+G33= NULL
G35+G36= NULL
MPL: claim 1

L28 ANSWER 5 OF 10 MARPAT COPYRIGHT 2005 ACS on STN
AN 138:8214 MARPAT
TI Medical use of thyromimetic compounds to treat hair loss and compositions
IN Chian, Yuan-Ching Phoebe; Cornelius, Peter; Doherty, Niall Stephen; Dow, Robert Lee
PA Pfizer Products Inc., USA
SO Eur. Pat. Appl., 32 pp.
CODEN: EPXXDW
DT Patent
LA English
IC ICM A61K031-167
ICS A61K031-53; A61K031-41; A61K031-4196; A61K031-4245; A61K031-426; A61P017-14; A61K007-06
CC 62-3 (Essential Oils and Cosmetics)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1262177	A2	20021204	EP 2002-253607	20020522
	EP 1262177	A3	20030903		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	CN 1389202	A	20030108	CN 2002-111473	20020424
	CA 2387198	AA	20021130	CA 2002-2387198	20020522
	ZA 2002004189	A	20031127	ZA 2002-4189	20020527
	AU 2002044462	A5	20021205	AU 2002-44462	20020530
	CN 1389203	A	20030108	CN 2002-121653	20020530
	US 2003007941	A1	20030109	US 2002-160516	20020530
	JP 2002370978	A2	20021224	JP 2002-159170	20020531
PRAI	US 2001-294962P		20010531		

AB The present invention provides methods and compns. for treating hair loss, including arresting and/or reversing hair loss and/or promoting hair growth, in mammals, such as humans, companion animals and livestock, using certain thyromimetic compds.
ST thyromimetic hair loss treatment; male pattern baldness therapy thyromimetic
IT Alopecia
Human
Shampoos
Skin preparations (pharmaceutical)

(thyromimetic compds. for treatment of hair loss and male pattern baldness)

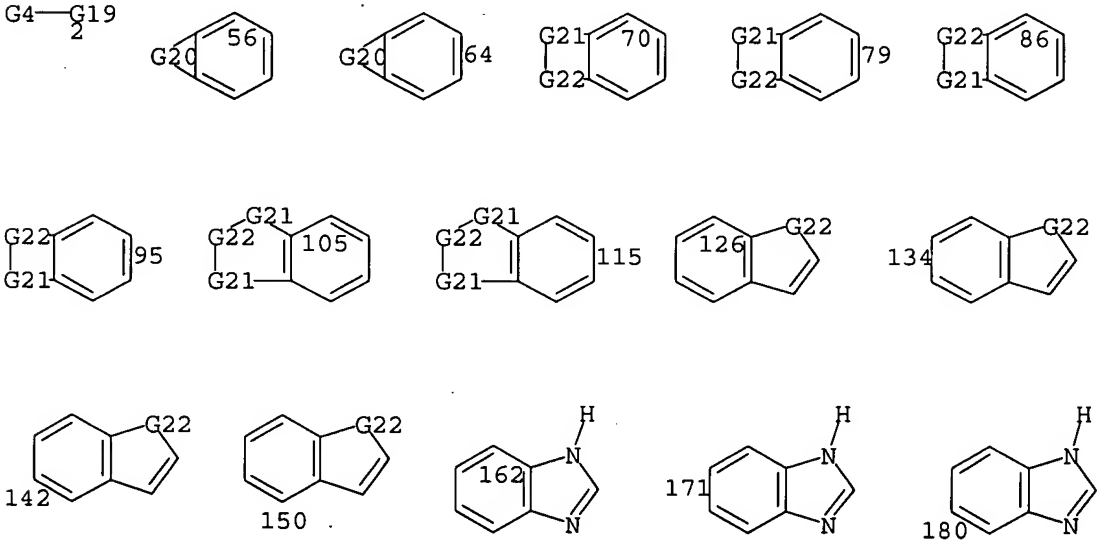
IT Thyroid hormones
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(thyromimetic compds. for treatment of hair loss and male pattern baldness)

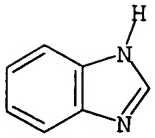
IT 427-51-0, Cyproterone acetate 38304-91-5, Minoxidil 98319-26-7, Finasteride 290349-38-1 290349-63-2 290350-21-9 290350-58-2 290352-09-9 290352-10-2 290352-11-3 290352-28-2 290352-70-4 290352-71-5 290352-72-6 290352-73-7 290352-74-8 290352-75-9 290352-76-0 290352-77-1 290352-78-2 290352-79-3 290352-80-6 290352-81-7 290352-82-8 332926-06-4 332926-09-7 332926-70-2 332927-11-4 332927-64-7 332927-73-8 332927-80-7 332927-85-2 332927-86-3 332928-28-6 477186-11-1 477186-12-2 477186-13-3 477186-14-4
RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(thyromimetic compds. for treatment of hair loss and male pattern baldness)

MSTR 1

G3—G18—G1—G15—C(O)-C(O)-G17

G1 = p-C6H4 (SO (1-2) G2)
G2 = F / Cl / Br / I / alkyl<(1-6)> / CF3 / CN / OCF3 / alkoxy<(1-6)> / (SC Me)
G3 = 2 / 56 / 64 / 70 / 79 / 86 / 95 / 105 / 115 / 126 / 134 / 142 / 150 / 162 / 171 / 180 / 189 / (SC 194 / 342 / 413 / 432 / 444)




189

194 C(O)-G23—G25

342 C(O)-G31

413 O_2S—G34—G35

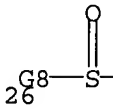
432 O_2S—G37

444 G12—G38

G4 = H / alkyl<(1-12)> (SO) / alkenyl<(2-12)> / F / Cl / Br / I / CN / aryl / heteroaryl<EC (0-) N (0-) O (0-) S (0) OTHERQ> / cycloalkyl<(3-10)> / Hy<EC (0-) N (0-) O (0-) S (0) OTHERQ, AR (0), BD (ALL) SE> / 9 / 16 / 26 / 30 / 33 / 36 / 42

9 G5—G6

16 G8—C(O)-G9


26

30 G8—SO_2—G7

33 G10—O—G11

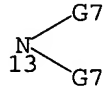
36 O—G11

42 G12—G13

G5 = SO2 / C(O) / alkylene<(1-6)>

G6 = NH2 / 11 / 13 / Hy<EC (1-2) Q (1-) N (0-) O (0-) S (0) OTHERQ, AN (1-) N> (SO)

11 HN—G7

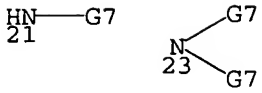

13

G7 = alkyl<(1-12)> (SO) / alkenyl<(2-12)> / cycloalkyl<(3-10)> (SO) / aryl (SO) / Hy<EC (1-8) Q (0-) N (0-) O (0-) S (0) OTHERQ, BD (0-) D (0-) T, RC (1-2), RS (0-) E4 (0-) E5 (0-) E6 (0-) E7 (0-) E8 (0) OTHER> (SO)

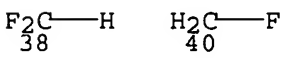
G8 = NH / 19

19 N—G7

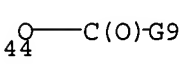
G9 = H / alkyl<(1-12)> (SO) / alkenyl<(2-12)> / cycloalkyl<(3-10)> (SO) / aryl (SO) / Hy<EC (1-8) Q (0-) N (0-) O (0-) S (0) OTHERQ, BD (0-) D (0-) T, RC (1-2), RS (0-) E4 (0-) E5 (0-) E6 (0-) E7 (0-) E8 (0) OTHER> (SO) / NH2 / 21 / 23 / Hy<EC (1-2) Q (1-) N (0-) O (0-) S (0) OTHERQ, AN (1-) N> (SO)



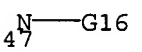
G10 = alkylene<(1-6)>
G11 = alkyl<(1-12)> / alkenyl<(2-12)> / cycloalkyl<(3-10)> / CF3 / 38 / 40 / aryl (SO) / Hy<EC (1-8) Q (0-) N (0-) O (0-) S (0) OTHERQ, BD (0-) D (0-) T, RC (1-2), RS (0-) E4 (0-) E5 (0-) E6 (0-) E7 (0-) E8 (0) OTHER> (SO)



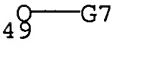
G12 = S / S(O) / SO2
G13 = alkyl<(1-12)> / alkenyl<(2-12)> / cycloalkyl<(3-10)> / aryl (SO) / Hy<EC (1-8) Q (0-) N (0-) O (0-) S (0) OTHERQ, BD (0-) D (0-) T, RC (1-2), RS (0-) E4 (0-) E5 (0-) E6 (0-) E7 (0-) E8 (0) OTHER> (SO)
G14 = F / Cl / Br / I / alkyl<(1-6)> / CF3 / CN / OCF3 / alkoxy<(1-6)> / OH / 44



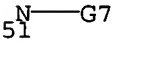
G15 = NH / 47



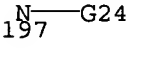
G16 = alkyl<(1-6)>
G17 = OH / 49 / NH2 / alkylamino<(1-6)> / dialkylamino<(1-6)> / (SC OMe / OEt / OPr-i / NHMe)



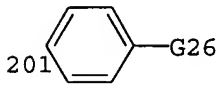
G18 = O / S / S(O) / SO2 / CH2 / NH / 51

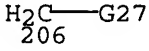


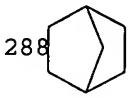
G19 = phenylene (SO (1-3) G14)
G20 = alkylene<EC (3-7) C, DC (0) M3>
G21 = alkylene<EC (2-6) C, DC (0) M3>
G22 = O / S / NH (SO)
G23 = NH / 197

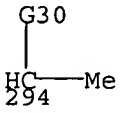


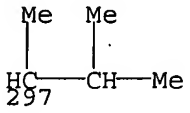
G24 = Me / Et
G25 = Me / Et / Pr-i / Pr-n / Bu-i / Bu-n / pentyl / hexyl / 201 / 206 / cyclopropyl / cyclobutyl / cyclopentyl / cyclohexyl / 288 / 294 / C(Me)2CH2Me / 297 / CH2CMe3 / 313 / 320 / 323 / 338

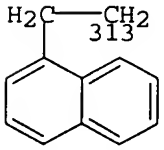


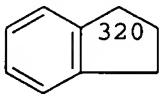


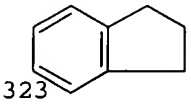


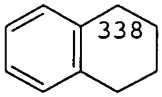




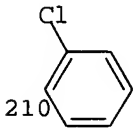


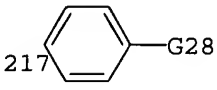


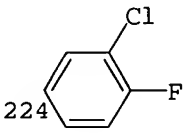


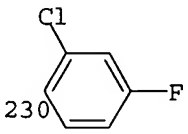


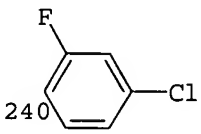
G26 = F / Ph
G27 = 2-thienyl / cyclopropyl / cyclohexyl / 210 / 217 / 224 / 230 / 240 / 248 / 256 / 264 / 272 / 1-naphthyl / 280

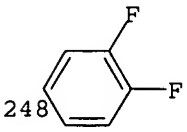


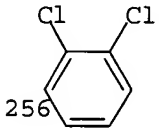


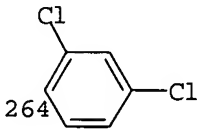


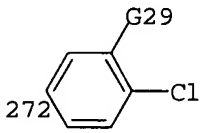


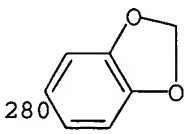




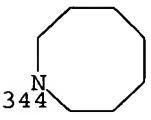


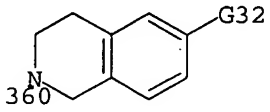


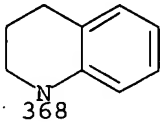


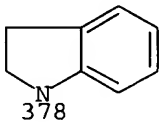


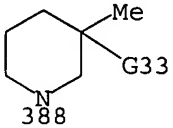
G28 = Cl / F / Pr-i / Bu-t
G29 = Cl / CF3
G30 = Ph / cyclohexyl / naphthyl
G31 = 344 / hexahydroazepino / piperidino / pyrrolidino / morpholino / 360 / 368 / 378 / 388 / 393 / 400 / 410

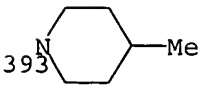


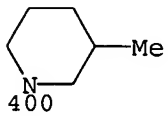


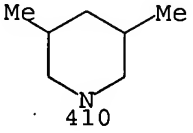




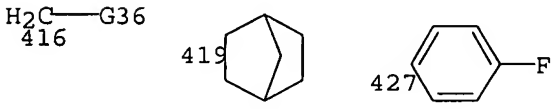




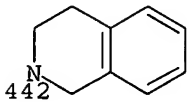




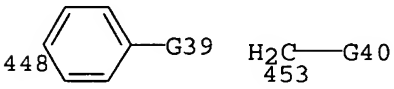
G32 = H / Me / OMe
G33 = Me / Ph
G34 = NH / NMe
G35 = Pr-i / 416 / cyclopropyl / 419 / Me / Et / 427 / cyclobutyl / cyclopentyl / cyclohexyl / Pr-n / Bu-n / pentyl / hexyl / octyl / decyl



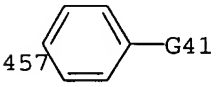
G36 = 2-thienyl / cyclopropyl / CH2OH
G37 = pyrrolidino / piperidino / morpholino / 442



G38 = 448 / naphthyl / 453 / Pr-i / cyclopentyl / p-C6H4Me / Me / Et / Bu-n / Pr-n

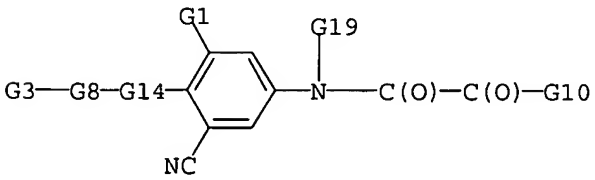


G39 = Cl / H
G40 = cyclopropyl / cyclobutyl / cyclohexyl / 457



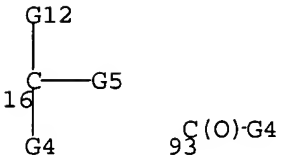
G41 = F / H
MPL: claim 1 .
NTE: or prodrugs or pharmaceutically acceptable salts
NTE: substitution is restricted
NTE: additional substitution also claimed
STE: or geometric or optical isomers

MSTR 2

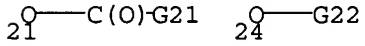


G1 = F / Cl / Br / I / alkyl<(1-8)> / CN /

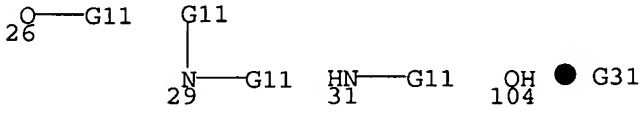
perfluoroalkyl<(1-8)> / (SC Me)
G2 = alkyl<(1-8)>
G3 = F / Cl / Br / I / perfluoroalkyl<(1-8)> / alkyl<(1-8)> / CHO / alkylcarbonyl<(1-8)> / alkyl<(1-8)> (SR OH) / aryl (SO (1-2) G16) / heteroaryl<EC (0-) N (0-) O (0-) S (0) OTHERQ> (SO (1-2) G16) / alkyl<(1-8)> (SR aryl) / arylcarbonyl (SO (1-2) G16) / cycloalkyl<(3-10)> (SO (1-2) G16) / alkyl<(1-8)> (SO cycloalkyl<(3-10)>) / 16 / 93



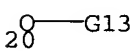
G4 = H / alkyl<(1-8)> / aryl (SO) / heteroaryl<EC (0-) N (0-) O (0-) S (0) OTHERQ> (SO) / alkyl<(1-8)> (SR aryl) / cycloalkyl<(3-10)> (SO) / alkyl<(1-8)> (SR cycloalkyl<(3-10)>)
G5 = H / alkyl<(1-8)>
G6 = OH (SO) / 21 / 24



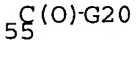
G7 = F / Cl / Br / I / alkyl<(1-8)> / perfluoroalkyl<(1-8)>
G8 = phenylene (SR (3) G9)
G9 = (-1) G2 / (1) G6 / (-1) G7 / H
G10 = OH / 26 / NH2 / 29 / 31 / 104



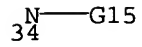
G11 = alkyl<(1-8)> / (SC Me / Et)
G12 = OH / 20



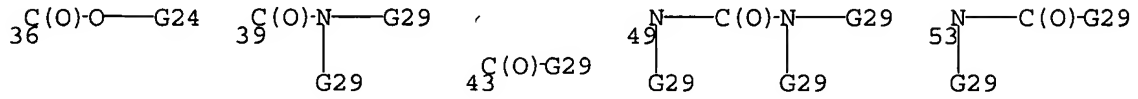
G13 = alkyl<(1-8)> / 55 / (SC Pr-i)



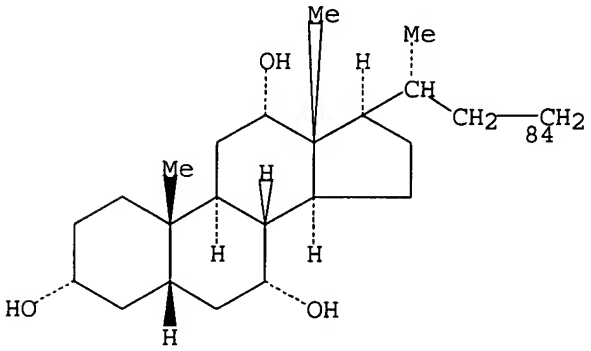
G14 = O / S / S(O) / SO2 / C(O) / NH / 34



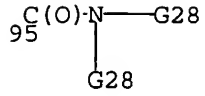
G15 = alkyl<(1-8)>
G16 = F / Cl / Br / I / CF3 / OCF3 / CN / alkyl<(1-6)> (SO (1-) G17) / alkoxy<(1-6)> / aryl (SO (1-) G18) / heteroaryl<EC (0-) N (0-) O (0-) S (0) OTHERQ> (SO (1-) G18) / CO2H / 36 / 39 / 43 / 49 / 53



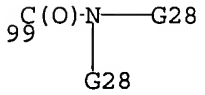
G17 = F / Cl / Br / I / OCF3 / CF3 / Ph
G18 = F / Cl / Br / I / OCF3 / CF3 / alkyl<(1-4)> / alkoxy<(1-4)>
G19 = H / alkyl<(1-8)> / perfluoroalkyl<(1-8)>
G20 = H / R / (EX alkyl<(1-8)> / alkyl<(1-8)> (SR G23) / aryl (SO) / heteroaryl<EC (0-) N (0-) O (0-) S (0) OTHERQ> (SO))
G21 = R / (EX alkyl<(1-12)> / aryl (SO) / heteroaryl<EC (0-) N (0-) O (0-) S (0) OTHERQ> (SO) / alkyl<(1-8)> (SR aryl) / 84)



G22 = R / (EX alkyl<(1-8)> / alkenyl<(2-8)> / cycloalkyl<(5-7)> / alkyl<(1-8)> (SR G23) / 2-tetrahydropyranyl / alkyl<(1-8)> (SR cycloalkyl<(5-7)>))
G23 = aryl (SO) / heteroaryl<EC (0-) N (0-) O (0-) S (0) OTHERQ> (SO)
G24 = alkyl<(1-6)> / alkenyl<(2-6)> / alkyl<(1-6)> (SR alkoxy<(1-6)>) / aryl (SO (1-2) G30) / Hy<EC (1-4) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (1), RS (1) M4 (1) X8> (SO (1-2) G30) / Hy<EC (1-8) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (2), RS (0-) E4 (0-) E5 (0-) E6 (0-) E7 (0-) E8 (0) OTHER> (SO (1-2) G30) / alkyl<(1-4)> (SR G25) / alkyl<(1-4)> (SR G26) / alkyl<(1-4)> (SR OH) / alkyl<(1-4)> (SR (1-) G27) / alkyl<(1-4)> (SR 95) / cycloalkyl<(3-10)>

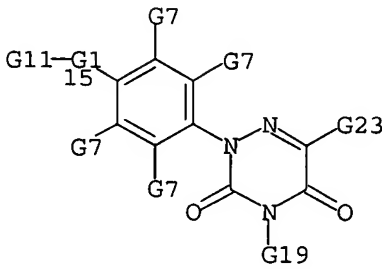


G25 = aryl (SO (1-2) G30)
G26 = Hy<EC (1-4) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (1), RS (1) M4 (1) X8> (SO (1-2) G30) / Hy<EC (1-8) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (2), RS (0-) E4 (0-) E5 (0-) E6 (0-) E7 (0-) E8 (0) OTHER> (SO (1-2) G30)
G27 = F / Cl / Br / I
G28 = H / alkyl<(1-6)> / cycloalkyl<(3-10)> / aryl (SO) / heteroaryl (SO)
G29 = H / alkyl<(1-6)> / alkenyl<(2-6)> / alkyl<(1-6)> (SR alkoxy<(1-6)>) / aryl (SO (1-2) G30) / Hy<EC (1-4) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (1), RS (1) M4 (1) X8> (SO (1-2) G30) / Hy<EC (1-8) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (2), RS (0-) E4 (0-) E5 (0-) E6 (0-) E7 (0-) E8 (0) OTHER> (SO (1-2) G30) / alkyl<(1-4)> (SR G25) / alkyl<(1-4)> (SR G26) / alkyl<(1-4)> (SR OH) / alkyl<(1-4)> (SR (1-) G27) / alkyl<(1-4)> (SR 99) / cycloalkyl<(3-10)>

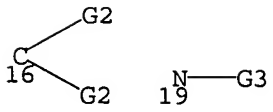


G30 = H / R
G31 = R<TX "pharmaceutically acceptable salt"> / (SC K / Na)
MPL: claim 2
NTE: or prodrugs
NTE: additional ring formation also claimed
STE: or geometric or optical isomers

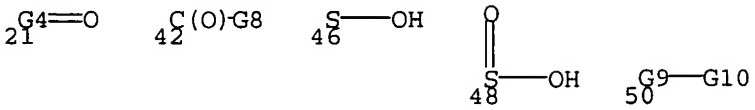
MSTR 3



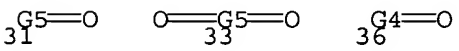
G1 = O / S / S(O) / SO2 / NH / 19 / C(O) / CH=CH / 16 / CHOH



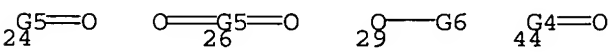
G2 = H / F
G3 = alkyl<(1-12)> (SO) / 21 / alkenyl<(2-6)> / cycloalkyl<(3-10)> / 42 / SH / 46 / 48 / 50



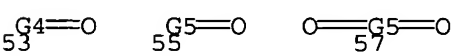
G4 = Ak<EC (1-12) C, BD (ALL) SE> (SO)
G5 = Hy<EC (4-8) A (1-4) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (1-3)> (SO)
G6 = Ph (SO) / naphthyl (SO) / biphenylyl (SO) / Hy<EC (4-8) A (1-4) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (1-3)> (SO) / 31 / 33 / alkyl<(1-12)> (SO) / 36 / alkenyl<(2-6)> / cycloalkyl<(3-10)>



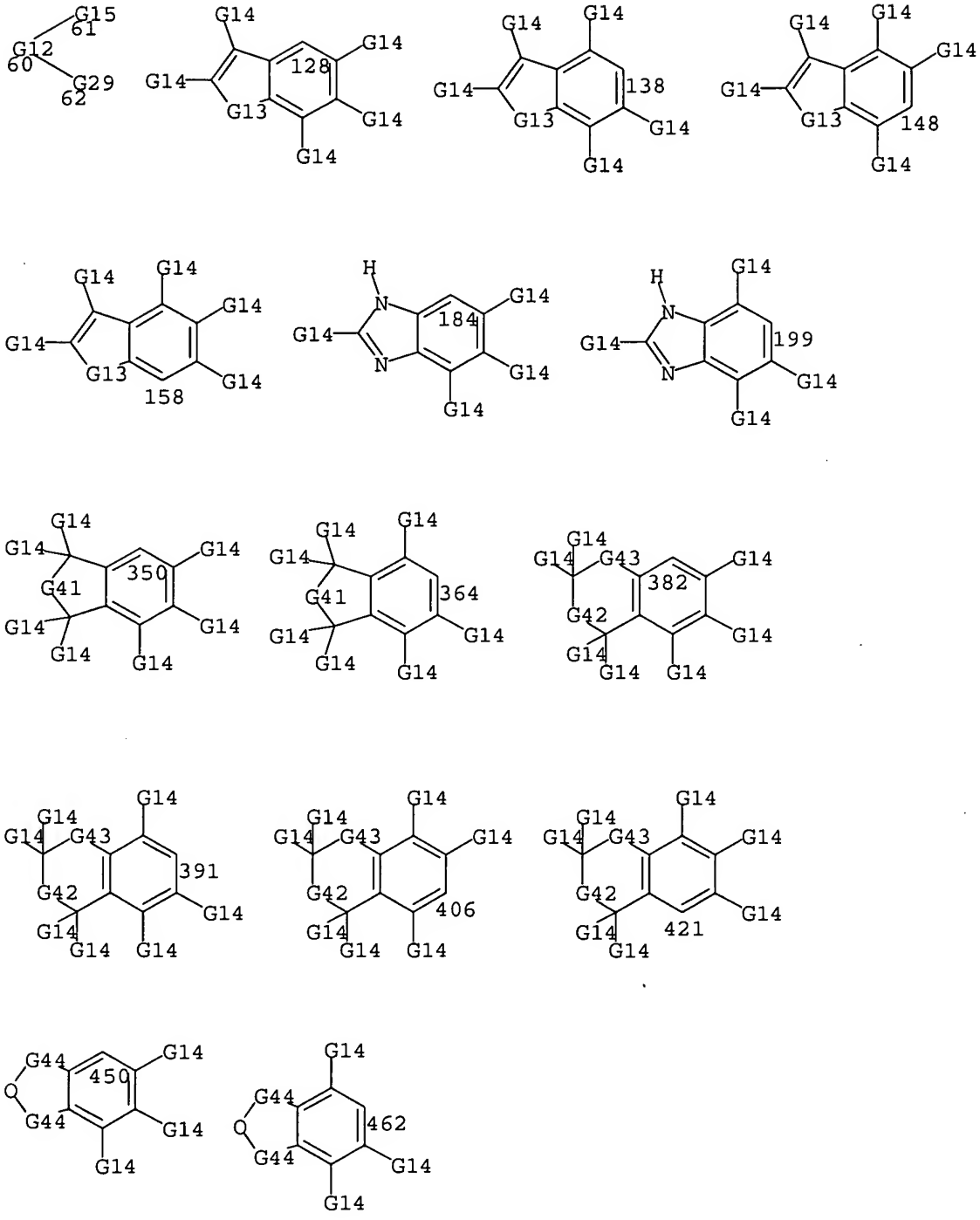
G7 = (2-) H / F / Cl / Br / I / alkyl<(1-6)> / CN / OH / alkoxy<(1-6)> (SO (1-) F) / CF3 / (SC Me)
G8 = H / alkyl<(1-12)> (SO) / 44 / alkenyl<(2-12)> / cycloalkyl<(3-10)> / Ph (SO) / naphthyl (SO) / biphenylyl (SO) / Hy<EC (4-8) A (1-4) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (1-3)> (SO) / 24 / 26 / 29



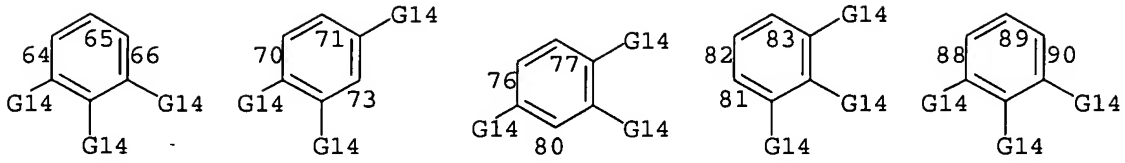
G9 = S / S(O) / SO2
G10 = alkyl<(1-12)> (SO) / 53 / alkenyl<(2-12)> / cycloalkyl<(3-10)> / Ph (SO) / naphthyl (SO) / biphenylyl (SO) / Hy<EC (4-8) A (1-4) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (1-3)> (SO) / 55 / 57

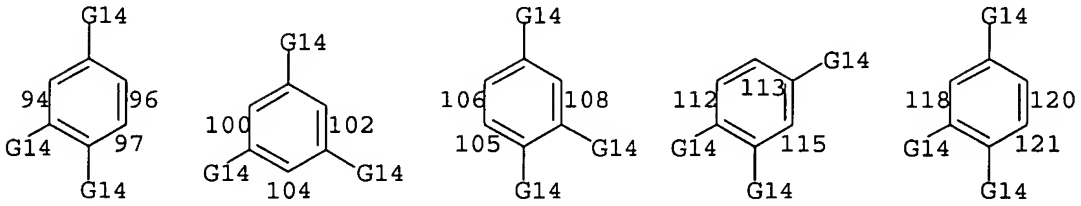


G11 = 60 / 128 / 138 / 148 / 158 / 184 / 199 / 350 / 364 / 382 / 391 / 406 / 421 / 450 / 462

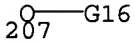


G12 = 64-15 65-61 66-62 / 70-15 71-61 73-62 /
76-15 77-61 80-62 / 82-15 83-61 81-62 / 88-15 90-61 89-62 /
94-15 96-61 97-62 / 100-15 102-61 104-62 /
106-15 108-61 105-62 / 112-15 115-61 113-62 /
118-15 121-61 120-62

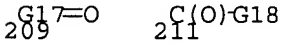




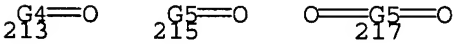
G13 = NH / O / S
G14 = H / R
G15 = OH / 207 / (SC OMe)



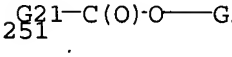
G16 = alkyl<(1-4)> (SO) / 209 / 211



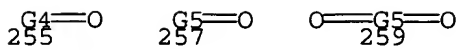
G17 = Ak<EC (1-4) C, BD (ALL) SE> (SO)
G18 = H / alkyl<(1-12)> (SO) / 213 / alkenyl<(2-12)> / cycloalkyl<(3-10)> / Ph (SO) / naphthyl (SO) / biphenylyl (SO) / Hy<EC (4-8) A (1-4) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (1-3)> (SO) / 215 / 217



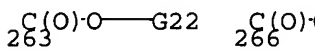
G19 = H / alkyl<(1-4)> (SO (1-) G20) / 251



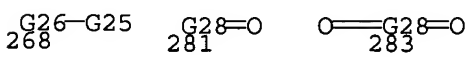
G20 = F / Cl / Br / I
G21 = (0-3) CH2
G22 = alkyl<(1-12)> (SO) / 255 / alkenyl<(2-12)> (SO Ph) / alkenyl<EC (2-12) C, BD (2) D> / cycloalkyl<(3-10)> / Ph (SO) / naphthyl (SO) / biphenylyl (SO) / Hy<EC (4-8) A (1-4) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (1-3)> (SO) / 257 / 259



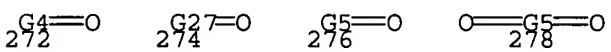
G23 = H / alkyl<(1-6)> / 263 / 266 / CN



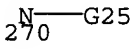
G24 = 268 / Hy<EC (4-8) A (1-4) Q (1-) N (0-) O (0-) S (0) OTHERQ, AN (1-) N, RC (1-3)> (SO) / 281 / 283



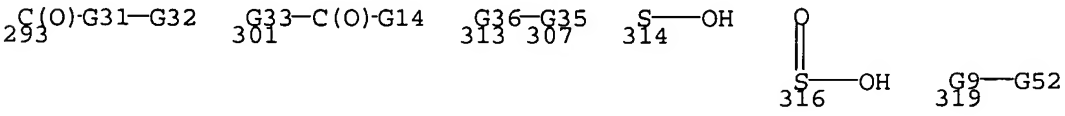
G25 = alkyl<(1-12)> (SO) / 272 / cycloalkyl<(3-10)> (SO) / 274 / alkenyl<(2-12)> / Hy<EC (4-8) A (1-4) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (1-3)> (SO) / 276 / 278

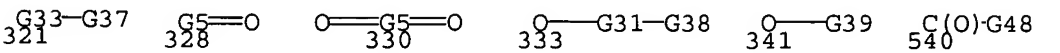


G26 = NH / 270



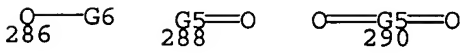
G27 = Cb<EC (3-10) C, AR (0), BD (ALL) SE> (SO)
G28 = Hy<EC (4-8) A (1-4) Q (1-) N (0-) O (0-) S (0) OTHERQ, AN (1-) N, RC (1-3)> (SO)
G29 = alkyl<(1-19)> (SO (1-) G30) / CHO / alkylcarbonyl<(1-6)> (SO (1-) F) / 293 / NH2 (SO) / 625 / 540 / 301 / 313 / SH / 314 / 316 / 319 / 321 / Ph (SO) / naphthyl (SO) / biphenylyl (SO) / Hy<EC (4-8) A (1-4) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (1-3)> (SO) / 328 / 330 / 333 / 341 / F / Cl / Br / I



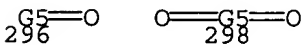


G30 = 286 / F / cycloalkyl<(3-10)> / Ph (SO) /

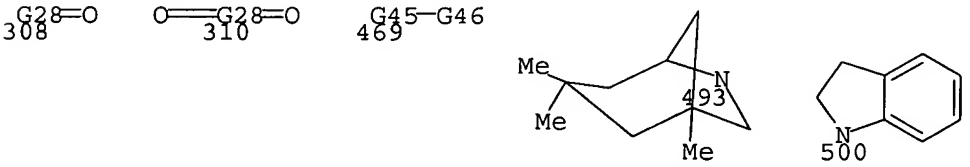
naphthyl (SO) / biphenylyl (SO) /
Hy<EC (4-8) A (1-4) Q (0-) N (0-) O (0-) S (0) OTHERQ,
RC (1-3)> (SO) / 288 / 290

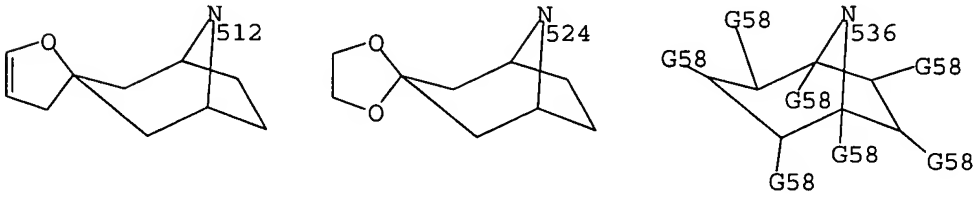


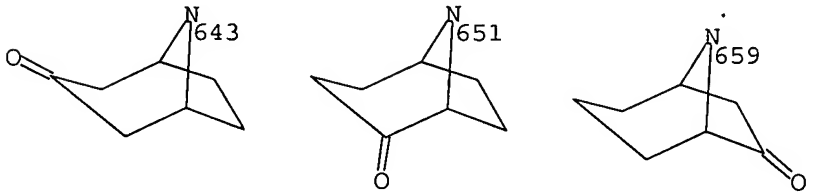
G31 = NULL / alkylene<(1-6)>
G32 = cycloalkyl<(3-10)> / Ph (SO) / naphthyl (SO) /
biphenylyl (SO) / Hy<EC (4-8) A (1-4) Q (0-) N (0-) O (0-)
S (0) OTHERQ, RC (1-3)> (SO) / 296 / 298



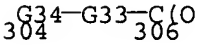
G33 = NH (SO)
G34 = NULL / alkylene<(1-3)>
G35 = NH2 (SO) / Hy<EC (4-8) A (1-4) Q (1-) N (0-) O (0-)
S (0) OTHERQ, AN (1-) N, RC (1-3)> (SO) / 308 / 310 /
(SC 469 / piperidino (SO (1-) G47) / pyrrolidino / 493 /
500 / 512 / 524 / 536 / 643 / 651 / 659)



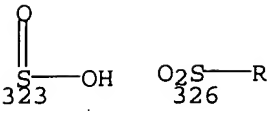




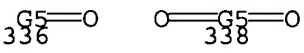
G36 = 304-60 306-307 / SO2



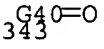
G37 = 323 / 326



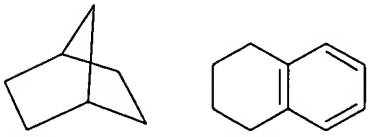
G38 = Ph (SO) / naphthyl (SO) / biphenylyl (SO) / Hy<EC (4-8) A (1-4) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (1-3)> (SO) / 336 / 338



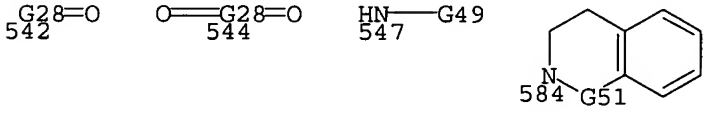
G39 = alkyl<(7-12)> (SO) / 343 / alkyl<(1-6)> (SO (1-) F) / alkenyl<(2-12)> / cycloalkyl<(3-10)>



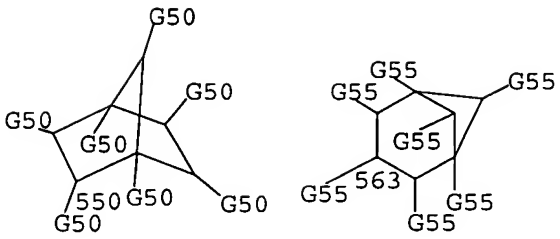
G40 = Ak<EC (7-12) C, BD (ALL) SE> (SO)
G41 = (1-5) CH2 (SO)
G42 = (0-4) CH2 (SO)
G43 = O / S / NH (SO)
G44 = (2-6) CH2 (SO)
G45 = NH / NMe
G46 = alkyl<(5-8)> / 472 / 484 / cyclobutyl / cyclopentyl / cyclohexyl / Ph (SO (1-) F)



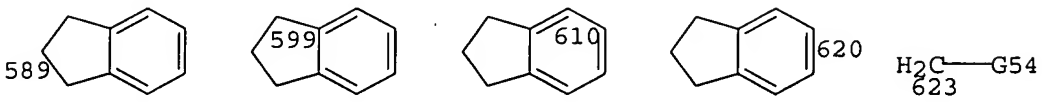
G47 = Me / Ph
G48 = NH2 (SO) / Hy<EC (4-8) A (1-4) Q (1-) N (0-) O (0-) S (0) OTHERQ, AN (1-) N, RC (1-3)> (SO) / 542 / 544 / (SC 547 / piperidino (SO (1-) G47) / pyrrolidino / hexahydroazepino / 584)



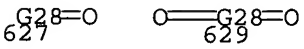
G49 = cyclopentyl (SO (1-) CH2OH) / 550 / 563



G50 = H / CH2OH / Me
G51 = (0-1) CH2
G52 = R / (SC Ph (SO (1-) G53) / 589 / 599 / 610 / 620 / 623)

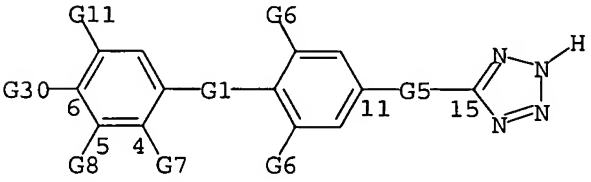


G53 = Me / Et
G54 = cycloalkyl<(4-6)>
G55 = H / Me
G56 = alkylene<(1-3)>
G57 = NH2 (SO) / Hy<EC (4-8) A (1-4) Q (1-) N (0-) O (0-) S (0) OTHERQ, AN (1-) N, RC (1-3)> (SO) / 627 / 629

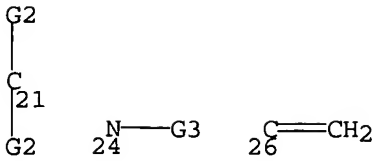


G58 = H / OH
MPL: claim 3
NTE: or pharmaceutically acceptable salts or prodrugs
NTE: additional ring formation also claimed
NTE: substitution is restricted
STE: and isomers

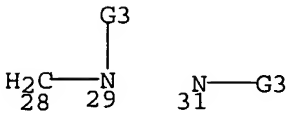
MSTR 4



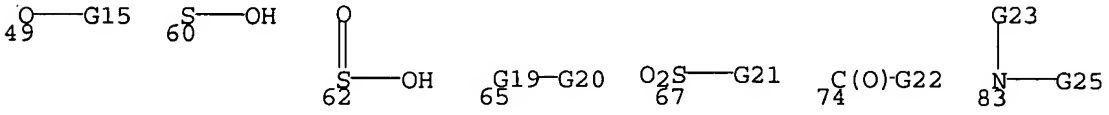
G1 = O / S / S(O) / SO2 / 21 / C(O) / CHOH / 24 / 26

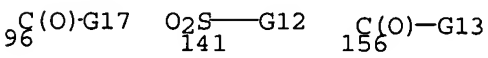


G2 = H / F
G3 = H / alkyl<(1-6)> (SO G4)
G4 = cycloalkyl<(3-6)> / OMe
G5 = O / CH2 / CH2CH2 / S / S(O) / SO2 / 28-11 29-15 / 31 / NULL

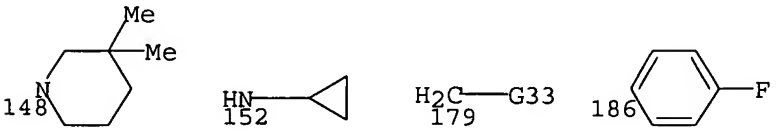


G6 = H / F / Cl / Br / I / alkyl<(1-8)> / CF3 / OCF3 / alkoxy<(1-8)> / CN / (SC Me)
G7 = H / F / Cl / Br / I / alkyl<(1-8)> / CF3 / OCF3 / alkoxy<(1-8)> / CN
G8 = H / alkyl<(1-12)> (SO) / alkenyl<(2-12)> / alkynyl<(2-12)> / F / Cl / Br / I / CN / OH / 49 / SH / 60 / 62 / 65 / aryl / heteroaryl<EC (0-) O (0-) N (0-) S (0-) P (0) OTHERQ> / cycloalkyl<(3-10)> / Hy<EC (0-) O (0-) N (0-) S (0-) P (0) OTHERQ, AR (0), BD (ALL) SE> / 67 / 74 / 83 / 96 / (SC Ph (SO) / naphthyl (SO) / Pr-i / 141 / 156)

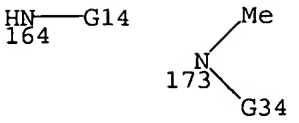




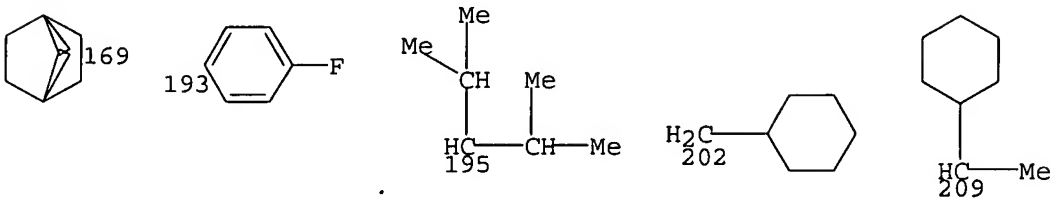
G11 = H / F / Cl / Br / I / alkyl<(1-8)> / CF3 / OCF3 / alkoxy<(1-8)> / CN
G12 = pyrrolidino / piperidino / 148 / 152 / NMe2 / 179 / 186



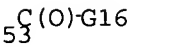
G13 = piperidino / 164 / pyrrolidino / 173



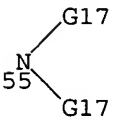
G14 = cyclobutyl / cyclohexyl / 169 / Me / Bu-n / Pr-i / heptyl / nonyl / 193 / cyclopentyl / cycloheptyl / cyclooctyl / 195 / 202 / 209



G15 = alkyl<(1-12)> (SO) / aryl / heteroaryl<EC (0-) O (0-) N (0-) S (0-) P (0) OTHERQ> / cycloalkyl<(3-10)> / Hy<EC (0-) O (0-) N (0-) S (0-) P (0) OTHERQ, AR (0), BD (ALL) SE> / 53



G16 = 55 / Hy<EC (3-10) A (1-) N (0-) O (0-) S (0) OTHERQ, AN (1-) N> (SO) / H / alkyl<(1-10)> (SO) / alkenyl<(2-10)> / alkoxy<(2-10)> / cycloalkyl<(3-10)> / Hy<EC (0-) O (0-) N (0-) S (0-) P (0) OTHERQ, AR (0), BD (ALL) SE> / aryl / heteroaryl<EC (0-) O (0-) N (0-) S (0-) P (0) OTHERQ>

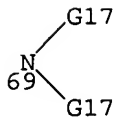


G17 = H / alkyl<(1-12)> (SO) / alkenyl<(2-12)> (SO) / alkynyl<(2-12)> / aryl / heteroaryl<EC (0-) O (0-) N (0-) S (0-) P (0) OTHERQ> / cycloalkyl<(3-10)> / Hy<EC (0-) O (0-) N (0-) S (0-) P (0) OTHERQ, BD (ALL) SE>

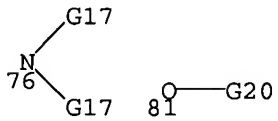
G19 = S / S(O) / SO2

G20 = alkyl<(1-12)> (SO) / alkenyl<(2-12)> / alkynyl<(2-12)> / aryl / heteroaryl<EC (0-) O (0-) N (0-) S (0-) P (0) OTHERQ> / cycloalkyl<(3-10)> / Hy<EC (0-) O (0-) N (0-) S (0-) P (0) OTHERQ, AR (0), BD (ALL) SE>

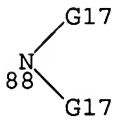
G21 = 69 / Hy<EC (1-) N (0-) O (0-) S (0) OTHERQ, AN (1-) N> (SO)



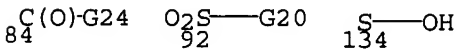
G22 = 76 / Hy<EC (1-) N (0-) O (0-) S (0) OTHERQ, AN (1-) N> (SO) / 81 / OH



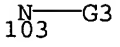
G23 = H / alkyl<(1-6)> (SO (1-) G4)
G24 = alkyl<(1-12)> (SO) / alkenyl<(2-12)> / alkynyl<(2-12)> / aryl / heteroaryl<EC (0-) O (0-) N (0-) S (0-) P (0) OTHERQ> / cycloalkyl<(3-10)> / Hy<EC (0-) O (0-) N (0-) S (0-) P (0) OTHERQ, AR (0), BD (ALL) SE> / 88 / Hy<EC (1-) N (0-) O (0-) S (0) OTHERQ, AN (1-) N> (SO)



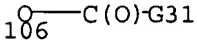
G25 = 84 / 92 / 134 / H / alkyl<(1-12)> (SO) / alkenyl<(2-12)> / alkynyl<(2-12)> / aryl / heteroaryl<EC (0-) O (0-) N (0-) S (0-) P (0) OTHERQ> / cycloalkyl<(3-10)> / Hy<EC (0-) O (0-) N (0-) S (0-) P (0) OTHERQ, AR (0), BD (ALL) SE>



G26 = (3-7) CH2 (SO)
G27 = O / S / 103

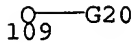


G28 = (2-6) CH2 (SO)
G29 = (1-5) CH2 (SO)
G30 = OH / alkoxy<(1-6)> / 106 / F

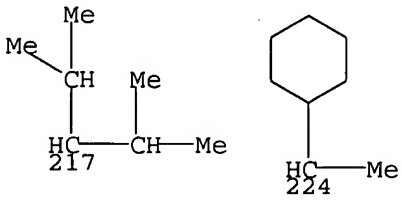


G31 = H / alkyl<(1-10)> (SO) / alkenyl<(2-10)> / alkoxy<(2-10)> / cycloalkyl<(3-10)> / Hy<EC (0-) O (0-) N (0-) S (0-) P (0) OTHERQ, AR (0), BD (ALL) SE> / aryl / heteroaryl<EC (0-) O (0-) N (0-) S (0-)

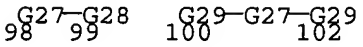
P (0) OTHERQ> / OH / 109.



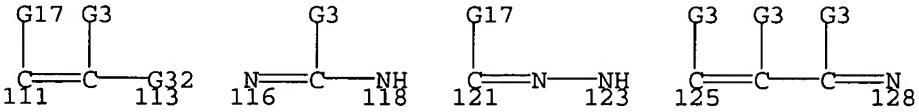
G32 = NH / O / S
G33 = cyclopropyl / cyclobutyl / cyclopentyl / cyclohexyl
G34 = cyclobutyl / cyclopentyl / cyclohexyl / cycloheptyl / cyclooctyl / 217 / 224



G7 +G8 = G26 / 98-4 99-5 / 100-4 102-5

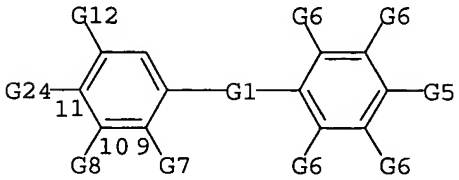


G8 +G30= 111-5 113-6 / 116-5 118-6 / 121-5 123-6 / 125-5 128-6

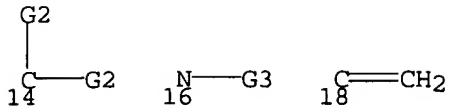


MPL: claim 6
NTE: pharmaceutically acceptable salts or prodrugs
NTE: substitution is restricted
NTE: additional oxo substitution also disclosed
STE: stereoisomers

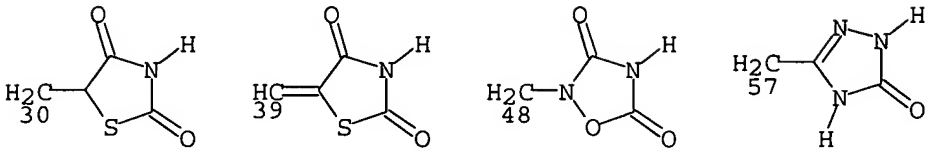
MSTR 5

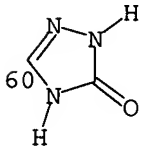


G1 = O / S / S(O) / SO2 / 14 / C(O) / CHOH / NH / 16 / 18

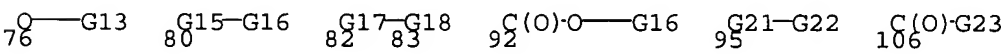


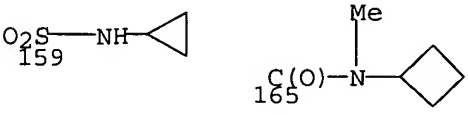
G2 = H / F
G3 = alkyl<(1-6)> (SO (1) G4)
G4 = cycloalkyl<(3-6)> / OMe
G5 = **30** / 39 / 48 / 57 / 60





G6 = (2-) H / F / Cl / Br / I / alkyl<(1-8)> / **CF3** / OCF3 / alkoxy<(1-8)> / CN / (SC Me)
G7 = H / F / Cl / Br / I / alkyl<(1-8)> / CF3 / OCF3 / alkoxy<(1-8)> / CN
G8 = H / alkyl<(1-8)> (SO) / alkenyl<(2-12)> / alkynyl<(2-12)> / F / Cl / Br / I / CN / OH / 76 / 82 / 80 / Ph (SO) / naphthyl (SO) / heteroaryl<EC (1-3) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (1-2)> (SO) / Cb<EC (3-10) C, AR (0), BD (0-) D> (SO) / Hy<EC (5-9) A (1-3) Q (0-) N (0-) O (0-) S (0) OTHERQ, AR (0), BD (0-) D, RC (1-2)> (SO) / CO2H / 92 / 95 / 106 / (SC Pr-i / 159 / 165)





G9 = (3-6) CH2 (SO)
G10 = (0-5) CH2 (SO)
G11 = O / S
G12 = H / F / Cl / Br / I / alkyl<(1-8)> / CF3 / OCF3 / alkoxy<(1-8)> / CN
G13 = alkyl<(1-12)> (SO) / Ph (SO) / naphthyl (SO) / heteroaryl<EC (1-3) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (1-2)> (SO) / Cb<EC (3-10) C, AR (0), BD (0-) D> (SO) /

Hy<EC (5-9) A (1-3) Q (0-) N (0-) O (0-) S (0) OTHERQ, AR (0), BD (0-) D, RC (1-2)> (SO) / 78

78 C(O)-G14

G14 = alkyl<(1-10)> (SO) / alkenyl<(2-12)> / alkynyl<(2-10)> / Cb<EC (3-10) C, AR (0), BD (0-) D> (SO) / Ph (SO) / naphthyl (SO) / heteroaryl<EC (1-3) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (1-2)> (SO) / Hy<EC (5-9) A (1-3) Q (0-) N (0-) O (0-) S (0) OTHERQ, AR (0), BD (0-) D, RC (1-2)> (SO)

G15 = S / S(O) / SO2

G16 = alkyl<(1-12)> (SO) / alkenyl<(2-12)> / alkynyl<(2-12)> / Ph (SO) / naphthyl (SO) / heteroaryl<EC (1-3) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (1-2)> (SO) / Cb<EC (3-10) C, AR (0), BD (0-) D> (SO) / Hy<EC (5-9) A (1-3) Q (0-) N (0-) O (0-) S (0) OTHERQ, AR (0), BD (0-) D, RC (1-2)> (SO)

G17 = 84-10 85-83 / SO2 / C(O)

84 G20—C(O) 85

G18 = NH2 / 86 / Hy<EC (3-10) A (1-2) Q (1-) N (0-) O (0-) S (0) OTHERQ, AN (1-) N> (SO)

86 G19—G16

G19 = NH / 88

88 N—G16

G20 = O / NH / 90

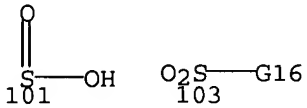
90 N—G3

G21 = NH / 99

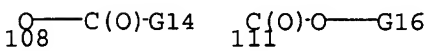
99 N—G3

G22 = 97 / 101 / 103

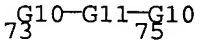
97 C(O)-G23



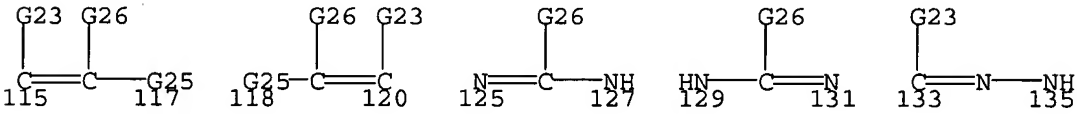
G23 = H / alkyl<(1-12)> (SO) / alkenyl<(2-12)> /
alkynyl<(2-12)> / Ph (SO) / naphthyl (SO) /
heteroaryl<EC (1-3) Q (0-) N (0-) O (0-) S (0) OTHERQ,
RC (1-2)> (SO) / Cb<EC (3-10) C, AR (0), BD (0-) D> (SO) /
Hy<EC (5-9) A (1-3) Q (0-) N (0-) O (0-) S (0) OTHERQ,
AR (0), BD (0-) D, RC (1-2)> (SO)
G24 = OH / alkoxy<(1-6)> / 108 / F / CO2H / 111 / (SC OMe)

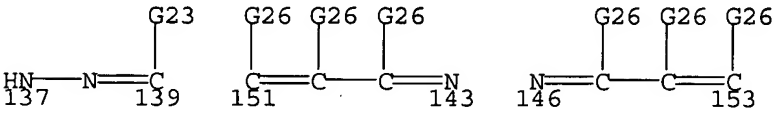


G25 = NH / O / S
G26 = H / alkyl<(1-6)> (SO (1) G4)
G7 +G8 = G9 / 73-9 75-10



G8 +G24= 115-10 117-11 / 118-10 120-11 / 125-10 127-11 /
129-10 131-11 / 133-10 135-11 / 137-10 139-11 /
151-10 143-11 / 146-10 153-11





MPL: claim 7
NTE: and prodrugs and pharmaceutically acceptable salts
NTE: substitution is restricted
NTE: additional oxo substitution also claimed
STE: and stereoisomers

L28 ANSWER 6 OF 10 MARPAT COPYRIGHT 2005 ACS on STN
AN 138:305 MARPAT
TI Preventive or recurrence-suppressive agents for liver cancer
IN Ohnota, Hideki; Hayashi, Morimichi; Kuroda, Junji; Komatsu, Yoshimitsu; Nishimura, Toshihiro
PA Kissei Pharmaceutical Co., Ltd., Japan
SO PCT Int. Appl., 142 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
IC ICM A61K045-00
ICS A61K031-197; A61P001-16; A61P035-00
CC 1-6 (Pharmacology)
FAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE

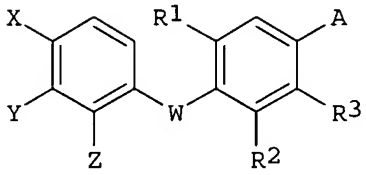
PI	WO 2002094319	A1	20021128	WO 2002-JP4601	20020513

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI JP 2001-149775 20010518

GI



I

AB Preventive or recurrence-suppressive agents for liver cancer containing as the active ingredient thyroid hormone receptor agonists having an effect of inhibiting the expression of liver estrogen sulfotransferase; and usage of the agents. The thyroid hormone receptor agonists are preferably compds. represented by the general formula I (R1 and R2 = alkyl, halogeno, or the like; R3 = hydrogen, alkyl, halogeno, or the like; X = hydroxyl or the like; W = O, S, CH2, or the like; Y = alkyl, -Q-T (wherein Q = O, CH2, CH(OH), or the like; and T = optionally substituted aryl or the like), or the like; Z = hydrogen, alkoxy, or the like; and A = -NHCO-Y1-CO2R8, -CH2CH(R9)NR10R11, or the like) or pharmaceutically acceptable salts thereof.

ST antitumor hepatoma thyroid hormone receptor agonists estrogen sulfotransferase

IT Carcinoma
(hepatocellular; preventive or recurrence-suppressive agents for liver cancer containing thyroid hormone receptor agonists)

IT Antitumor agents
Liver, neoplasm
(hepatoma; preventive or recurrence-suppressive agents for liver cancer containing thyroid hormone receptor agonists)

IT Thyroid hormone receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(preventive or recurrence-suppressive agents for liver cancer containing thyroid hormone receptor agonists)

IT 51-48-9, T4, biological studies 70-18-8, Glutathione, biological studies 6893-02-3, T3 9000-86-6, ALT 9001-60-9 9001-78-9, Alkaline phosphatase 9032-76-2, Estrogen sulfotransferase 9046-27-9, γ-Glutamyltransferase 50812-37-8, Glutathione-S-transferase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(preventive or recurrence-suppressive agents for liver cancer containing thyroid hormone receptor agonists)

IT 355129-15-6P 355129-23-6P 364331-19-1P 364331-20-4P 364331-24-8P 364332-53-6P 364332-59-2P 364332-60-5P 373641-10-2P 373641-11-3P 373641-12-4P 373641-13-5P 373641-14-6P 373641-15-7P 373641-16-8P

373641-17-9P 373641-18-0P 373641-19-1P 373641-20-4P 373641-22-6P
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373641-63-5P 373641-64-6P 373641-65-7P 373641-66-8P 373641-67-9P
373641-68-0P 373641-69-1P 373641-70-4P 373641-71-5P 373641-72-6P
373641-73-7P 373641-74-8P 373641-75-9P 373641-76-0P 373641-77-1P
373641-78-2P 373641-79-3P 373641-80-6P 373641-81-7P 373641-82-8P
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373641-88-4P 373641-89-5P 373641-90-8P 373641-91-9P 373641-92-0P
477274-10-5P 477274-11-6P 477274-12-7P
RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preventive or recurrence-suppressive agents for liver cancer containing thyroid hormone receptor agonists)

IT 2423-71-4P, 2,6-Dimethyl-4-nitrophenol 3886-19-9P, 2,6-Dibenzyloxyacetophenone 4049-39-2P, 4-Benzyloxy-3-hydroxybenzaldehyde 20404-02-8P, 2,3,6-Trichloro-4-nitrophenol 23860-35-7P, Cyclohexylacetylchloride 29417-96-7P 40500-05-8P 53906-85-7P, 4-Iodo-3,5-dimethylnitrobenzene 85064-61-5P, 4-Tetrahydropyranylacetic acid 92892-06-3P 103260-44-2P 117832-15-2P 130312-00-4P 156740-97-5P, 4-(4-Methoxyphenoxy)-3,5-dimethylnitrobenzene 355377-72-9P, 5-(2,6-Dimethyl-4-nitrophenoxy)-2-methoxybenzaldehyde 373641-93-1P 373641-94-2P 373641-96-4P 373641-97-5P, 4-Benzyloxy-3-(4-fluorophenoxy)benzaldehyde 373641-98-6P 373641-99-7P 373642-00-3P 373642-01-4P 373642-02-5P 373642-03-6P, 4-Benzyloxy-3-isopropylbenzaldehyde 373642-05-8P 373642-07-0P 373642-09-2P 373642-10-5P 373642-12-7P 373642-14-9P 373642-16-1P 373642-18-3P 373642-20-7P, 1-Benzyloxy-4-(2,3,6-trichloro-4-nitrophenoxy)-5,6,7,8-tetrahydronaphthalene 373642-22-9P, 3-Chloro-6-[5-(2,6-dimethyl-4-nitrophenoxy)-2-methoxybenzyl]pyridazine 373642-24-1P, 1-[6-Benzyloxy-3-(2,6-dimethyl-4-nitrophenoxy)-2-hydroxyphenyl]ethanone 373642-26-3P, 1-[6-Benzyloxy-3-(2,6-dimethyl-4-nitrophenoxy)-2-methoxyphenyl]ethanone 373642-28-5P 373642-30-9P 373642-32-1P, N,N-Dibenzyl-4-iodo-3,5-dimethylaniline 373642-34-3P, (4-Benzyloxy-3-isopropylphenyl)(4-dibenzylamino-2,6-dimethylphenyl)methanol 373642-37-6P 373642-39-8P, [4-Benzyloxy-3-(4-fluorophenoxy)phenyl](4-dibenzylamino-2,6-dimethylphenyl)methanol 373642-41-2P 373642-43-4P 373642-45-6P 373642-47-8P 373642-49-0P 373642-51-4P 373642-53-6P, 5-(2,6-Dimethyl-4-nitrophenoxy)-2-hydroxybenzaldehyde 373642-55-8P 373642-61-6P 373642-62-7P 373642-63-8P 373642-66-1P 373642-67-2P 373642-68-3P 373642-69-4P 373642-70-7P 373642-71-8P 373642-72-9P 373642-73-0P 373642-75-2P 373642-76-3P 373642-77-4P 373642-78-5P 373642-79-6P 373642-80-9P, 3-[3-[5-(4-Amino-2,6-dimethylphenoxy)-2-hydroxybenzyl]phenyl]propanoic acid 373642-82-1P 373642-83-2P, 1-[5-(4-Amino-2,6-dimethylphenoxy)-2-hydroxyphenyl]-2-cyclohexylethanone 373642-84-3P, 4-(4-Amino-2,6-dimethylphenoxy)-2-(2-cyclohexylethyl)phenol 373642-85-4P, 4-(4-Amino-2,6-dimethylphenoxy)-2-isopropyl-3-methoxyphenol 373642-86-5P, 4-[4-Methoxy-3-[2-(2-methoxyphenyl)ethyl]phenoxy]-3,5-dimethylaniline 373642-87-6P, (4-Amino-2,6-dimethylphenyl)(4-hydroxy-3-isopropylphenyl)methanone 373642-88-7P, 4-(4-Amino-2,6-dimethylbenzyl)-2-isopropylphenol 373642-89-8P, 4-(4-Methoxybenzyl)-3,5-dimethylaniline 373642-91-2P, 4-(4-Amino-2,6-dimethylphenoxy)-2-(4-tetrahydropyranyloxy)phenol 373642-92-3P, 4-(4-Amino-2,6-dimethylbenzyl)-2-(4-tetrahydropyranyloxy)phenol 373642-93-4P, 1-(4-Amino-2,6-

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RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

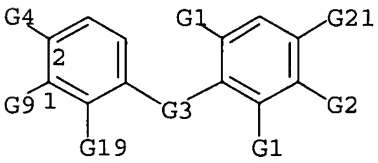
(preventive or recurrence-suppressive agents for liver cancer containing thyroid hormone receptor agonists)

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD

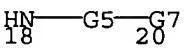
RE

(1) Ciba-Geigy A-G; JP 06-172275 A 1994 CAPLUS
(2) Ciba-Geigy A-G; CA 2100817 A 1994 CAPLUS
(3) Ciba-Geigy A-G; EP 580550 A 1994 CAPLUS
(4) Ciba-Geigy A-G; AU 667924 B2 1994 CAPLUS
(5) Ledda-Columbano, G; Cancer Research 2000, V60(3), P603 CAPLUS
(6) Yokoyama, N; J Med Chem 1995, V38(4), P695 CAPLUS

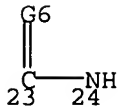
MSTR 1



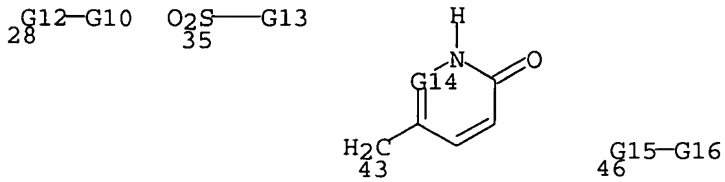
G1 = alkyl<(1-3)> / **CF3** / F / Cl / Br / I / CN / (SC Me)
G2 = H / alkyl<(1-3)> / CF3 / F / Cl / Br / I / (SC Et / Pr-n / Me)
G3 = **O** / S / CH2 / CHOH / C(O) / S(O) / SO2
G4 = OH / 18



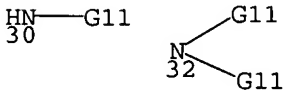
G5 = C(O) / S(O) / SO2 / 23-18 24-20



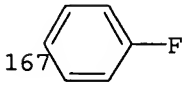
G6 = O / S
G7 = alkyl<(1-10)> / cycloalkyl<(3-8)> / aryl<RC (1-3)> (SO (1-) G8)
G8 = OH / alkyl<(1-6)> (SO CO2H) / alkoxy<(1-6)> / alkyl<(1-6)> (SR alkoxycarbonyl<(1-6)>) / F / Cl / Br / I
G9 = alkyl<(1-10)> / CF3 / cycloalkyl<(3-8)> / aryl<RC (1-3)> (SO (1-) G8) / 28 / 35 / 43 / 46 / (SC Pr-i)



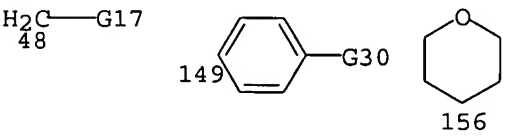
G10 = NH2 / 30 / 32 / Hy<EC (1-) N, AN (1-) N, RS (0-) E5 (0-) E6 (0-) E7 (0) OTHER>



G11 = alkyl<(1-10)> / cycloalkyl<(3-8)> / alkyl<(1-6)> (SR cycloalkyl<(3-8)>) / aryl<RC (1-3)> (SO (1-) G8)
G12 = SO2 / C(O)
G13 = alkyl<(1-10)> / cycloalkyl<(3-8)> / alkyl<(1-6)> (SR cycloalkyl<(3-8)>) / aryl<RC (1-3)> (SO (1-) G8) / (SC 167)



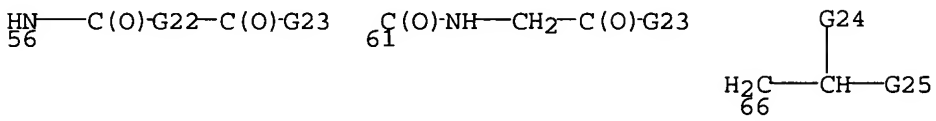
G14 = CH / N
G15 = O / CH2 / CHOH / C(O)
G16 = aryl<RC (1-3)> (SO (1-) G8) / 48 / cycloalkyl<(3-8)> / Hy<EC (1-) O (0) OTHERQ (-8) C, BD (ALL) SE> / (SC 149 / 156)

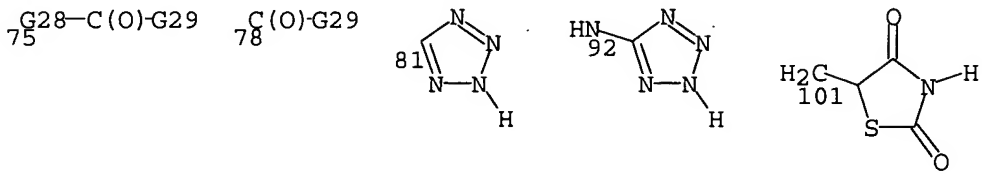


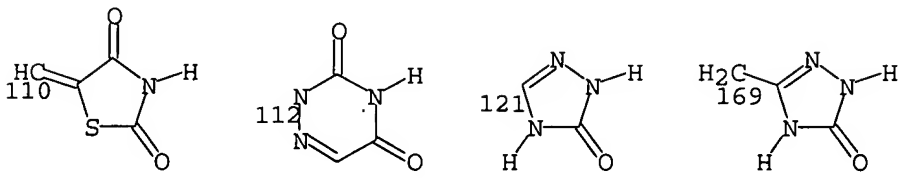
G17 = aryl<RC (1-3)> (SO (1-) G8) / cycloalkyl<(3-8)> / Hy<EC (1-) O (0) OTHERQ (-8) C, BD (ALL) SE> / (SC 157)


157

G18 = H / alkyl<(1-6)> / (SC Me / Pr-i / Et)
G19 = H / alkoxy<(1-3)>
G20 = (3-4) CH2
G21 = 56 / 61 / 66 / 75 / 78 / 81 / 92 / **101** / 110 / 112 / 121 / 169 / 170


56 61 66


75 78 81 92 101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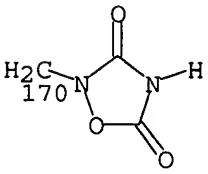
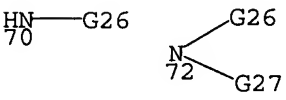
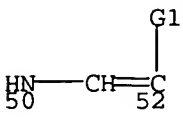

170

G22 = NULL / alkylene<(1-6)> / CH=CH / (SC CH2)
G23 = OH / alkoxy<(1-6)> (SO (1-) aryl<RC (1-3)>)
G24 = CO2H / alkoxycarbonyl<(1-6)>
G25 = NH2 / 70 / 72


70 72

G26 = alkyl<(1-6)> / CHO / alkylcarbonyl<(1-4)>
G27 = alkyl<(1-6)>
G28 = alkylene<(1-6)>

G29 = OH / alkoxy<(1-6)>
G30 = F / Cl
G4 +G9 = 50-2 52-1



G9 +G19= G20
MPL: claim 3
NTE: or pharmacologically acceptable salts

L28 ANSWER 7 OF 10 MARPAT COPYRIGHT 2005 ACS on STN
AN 136:216745 MARPAT
TI Preparation and activity of diphenylethylene thiazolidinediones and analogs as antidiabetics, antiinflammatories, or immunomodulators
IN Nag, Bishwajit; Dey, Debendranath; Medicherla, Satyanarayana; Neogi, Partha
PA USA
SO U.S. Pat. Appl. Publ., 30 pp., Cont.-in-part of U.S. Ser. No. 591,105.
CODEN: USXXCO
DT Patent
LA English
IC ICM A61K031-426
ICS A61K031-421; A61K031-4166; C07D277-34; C07D263-18; C07D233-40
NCL 514369000
CC 28-7 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1, 25
FAN.CNT 9

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002025975	A1	20020228	US 2001-785554	20010220
	US 6245814	B1	20010612	US 1998-74925	19980508
	US 2002032225	A1	20020314	US 2001-843167	20010427
	CA 2410171	AA	20011220	CA 2001-2410171	20010605
	WO 2001095859	A2	20011220	WO 2001-US17950	20010605
	WO 2001095859	A3	20030828		
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	AU 2001066670	A5	20011224	AU 2001-66670	20010605
	EP 1360178	A2	20031112	EP 2001-944241	20010605
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
	JP 2004527455	T2	20040909	JP 2002-510041	20010605
	US 2003181494	A1	20030925	US 2002-265902	20021008
	US 2004186299	A1	20040923	US 2004-808519	20040325
PRAI	US 1998-74925	19980508			
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US 2000-591105 20000609
US 2001-785554 20010220
US 2001-843167 20010427
WO 2001-US17950 20010605

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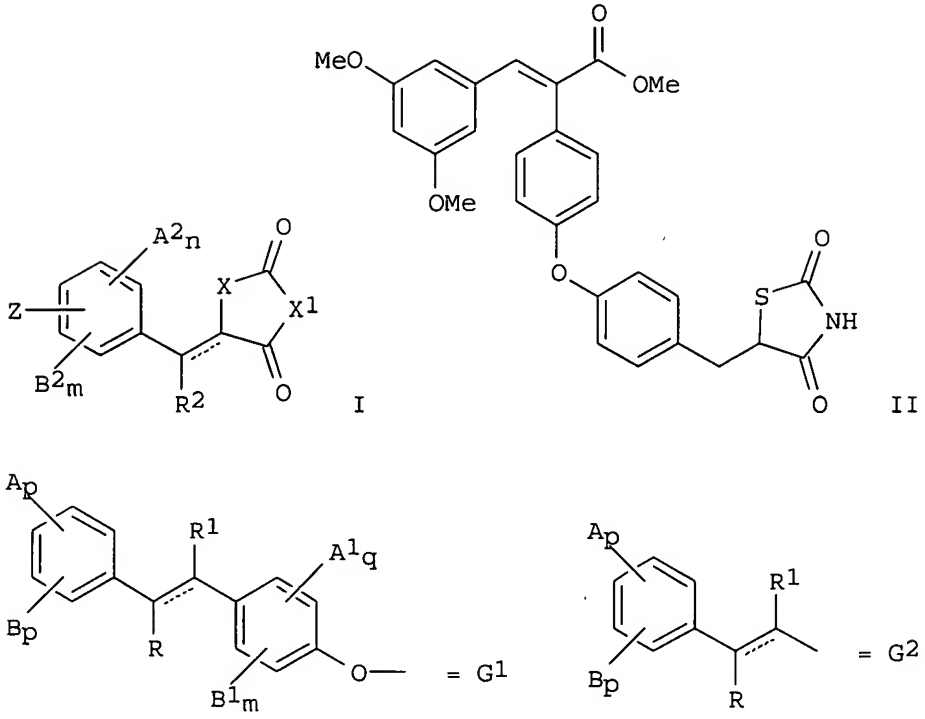


AB Title compds. I [wherein Z = G1, H, A2, B2, or G2; n, m, and q = independently 0-4; p = independently 0-5; R, R1, and R2 = independently H, (un)substituted alkyl or alkenyl, CO2Z1, CO2R3, NH2, NHR3, NR32, OH, OR3, or halo; Z1 = H, Na, K, or other pharmaceutically acceptable counterion; R3 = alkyl or alkenyl; A, A1, and A2 = independently H, acylamino, acyloxy, alkanoyl, alkoxycarbonyl, alkoxy, alkylamino, alkylcarboxylamino, carboxyl, CN, H, or OH; B, B1, and B2 = independently H, acylamino, acyloxy, alkanoyl, alkenoyl, alkoxycarbonyl, alkoxy, alkylamino, alkylcarboxylamino, aroyl, aralkanoyl, carboxyl, CN, halo, or OH; or A and B or A1 and B1 or A2 and B2 together form a methylenedioxy or ethylenedioxy group; X and X1 = independently NH, NR3, O, or S] are provided which are effective in lowering blood glucose level, serum insulin, triglyceride, and free fatty acid levels in animal models of Type II diabetes. In contrast to previously reported thiazolidinedione compds., known to lower leptin levels, the present compds. increase leptin levels and have no known liver toxicity. Thus, II was prepared in five steps by condensation of 3,5-dimethoxybenzaldehyde with 4-hydroxyphenylacetic acid (47%), followed by esterification (97%), etherification with 4-fluorobenzaldehyde (77%), condensation with 2,4-thiazolidinedione (86%), and hydrogenation of the ylidene double bond (40%). Oral administration of II to obese mice caused a 62% drop in blood glucose level. I are useful for the treatment of inflammation,

inflammatory and immunol. diseases, insulin resistance, hyperlipidemia, coronary artery disease, cancer, and multiple sclerosis.

ST diphenylethylene thiazolidinedione prepn antidiabetic antiinflammatory; thiazolidinedione prepn leptin level increase no liver toxicity

IT Hepatotoxicity
(avoidance; preparation and activity of diphenylethylene thiazolidinediones and analogs as antidiabetics, antiinflammatories, or immunomodulators)

IT Glycerides, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(blood; preparation and activity of diphenylethylene thiazolidinediones and analogs as antidiabetics, antiinflammatories, or immunomodulators)

IT Artery, disease
(coronary, treatment; preparation and activity of diphenylethylene thiazolidinediones and analogs as antidiabetics, antiinflammatories, or immunomodulators)

IT Autoimmune disease
(exptl. autoimmune encephalomyelitis, treatment; preparation and activity of diphenylethylene thiazolidinediones and analogs as antidiabetics, antiinflammatories, or immunomodulators)

IT Encephalomyelitis
(exptl. autoimmune, treatment; preparation and activity of diphenylethylene thiazolidinediones and analogs as antidiabetics, antiinflammatories, or immunomodulators)

IT Cytokines
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(inhibitors; preparation and activity of diphenylethylene thiazolidinediones and analogs as antidiabetics, antiinflammatories, or immunomodulators)

IT Anti-inflammatory agents
(nonsteroidal; preparation and activity of diphenylethylene thiazolidinediones and analogs as antidiabetics, antiinflammatories, or immunomodulators)

IT Antidiabetic agents
(oral; preparation and activity of diphenylethylene thiazolidinediones and analogs as antidiabetics, antiinflammatories, or immunomodulators)

IT Antiarthritics
Antiobesity agents
Antitumor agents
Human
Hypolipemic agents
Immunomodulators
(preparation and activity of diphenylethylene thiazolidinediones and analogs as antidiabetics, antiinflammatories, or immunomodulators)

IT Interleukin 1
Interleukin 1β
Interleukin 6
Tumor necrosis factors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(preparation and activity of diphenylethylene thiazolidinediones and analogs as antidiabetics, antiinflammatories, or immunomodulators)

IT Multiple sclerosis
(therapeutic agents; preparation and activity of diphenylethylene thiazolidinediones and analogs as antidiabetics, antiinflammatories, or immunomodulators)

IT Blood vessel, disease
(treatment; preparation and activity of diphenylethylene thiazolidinediones and analogs as antidiabetics, antiinflammatories, or immunomodulators)

IT 249886-47-3P

RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation and activity of diphenylethylene thiazolidinediones and analogs as antidiabetics, antiinflammatories, or immunomodulators)

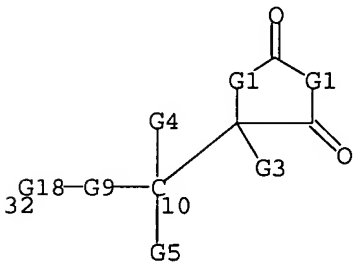
IT 9000-86-6, Glutamic pyruvic transaminase 9000-97-9, Glutamic oxalacetic transaminase 169494-85-3, Leptin 329900-75-6, Cyclooxygenase 2 329967-85-3, Cyclooxygenase 1
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(preparation and activity of diphenylethylene thiazolidinediones and analogs as antidiabetics, antiinflammatories, or immunomodulators)

IT 156-38-7, p-Hydroxyphenylacetic acid 459-57-4, p-Fluorobenzaldehyde 2295-31-0, 2,4-Thiazolidinedione 7311-34-4, 3,5-Dimethoxybenzaldehyde
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation and activity of diphenylethylene thiazolidinediones and analogs as antidiabetics, antiinflammatories, or immunomodulators)

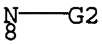
IT 380881-25-4P 380881-27-6P 380881-29-8P 380881-31-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and activity of diphenylethylene thiazolidinediones and analogs as antidiabetics, antiinflammatories, or immunomodulators)

IT 9004-10-8, Insulin, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(resistance; preparation and activity of diphenylethylene thiazolidinediones and analogs as antidiabetics, antiinflammatories, or immunomodulators)

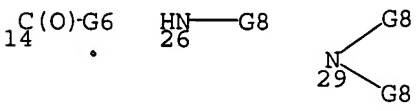
MSTR 1A



G1 = 8 / O / S



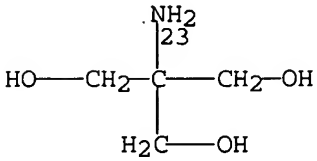
G2 = H / alkyl<(1-20)> / alkenyl<(2-20)>
G3 = H
G4 = H
G5 = H / Ak<EC (1-20) C, BD (0-) D (0) T> (SO) / 14 / NH2 / 26 / 29 / OH / alkoxy<(1-20)> / alkenyloxy<(2-20)> / F / Cl / Br / I



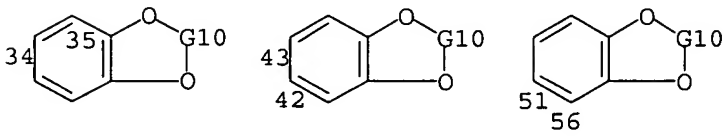
G6 = OH / 16 / alkoxy<(1-20)> / alkenyloxy<(2-20)> / (SC OMe)

16OH ● G7

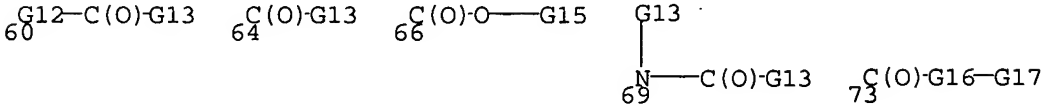
G7 = Na / K / R<TX "pharmaceutically acceptable counterion"> / Ca / Mg / NH3 / 23



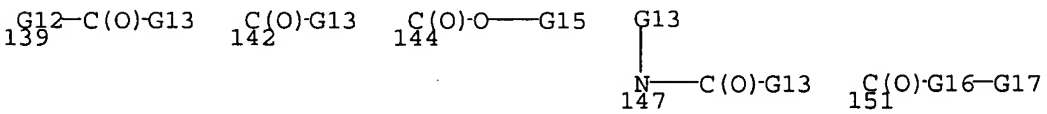
G8 = alkyl<(1-20)> / alkenyl<(2-20)>
G9 = phenylene (SO (1-) G11) / 35-32 34-10 / 43-32 42-10 / 51-32 56-10



G10 = (1-2) CH2
G11 = 60 / 64 / CO2H / 66 / alkoxy<(1-20)> / alkenyloxy<(2-20)> / alkylamino<(1-20)> / alkenylamino<(2-20)> / 69 / CN / F / Cl / Br / I / OH / arylcarbonyl (SO) / 73 / (SC OMe)



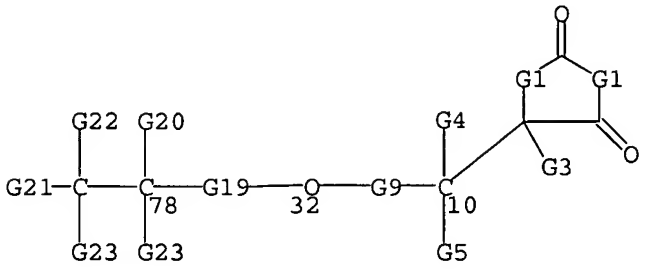
G12 = O / NH
G13 = H / alkyl<(1-20)> / alkenyl<(2-20)>
G15 = alkyl<(1-20)> / alkenyl<(2-20)>
G16 = alkylene<(1-20)>
G17 = aryl (SO)
G18 = H / 139 / 142 / CO2H / 144 / alkoxy<(1-20)> / alkenyloxy<(2-20)> / alkylamino<(1-20)> / alkenylamino<(2-20)> / 147 / CN / F / Cl / Br / I / OH / arylcarbonyl (SO) / 151



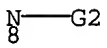
G3 +G4 = NULL
MPL: claim 1

NTE: substitution is restricted

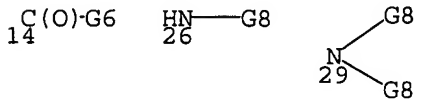
MSTR 1B



G1 = **8** / O / **S**

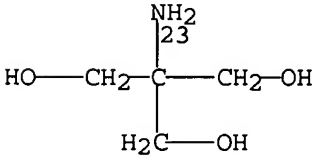


G2 = H / alkyl<(1-20)> / alkenyl<(2-20)>
G3 = H
G4 = H
G5 = H / Ak<EC (1-20) C, BD (0-) D (0) T> (SO) / 14 / NH2 / 26 / 29 / OH / alkoxy<(1-20)> / alkenyloxy<(2-20)> / F / Cl / Br / I

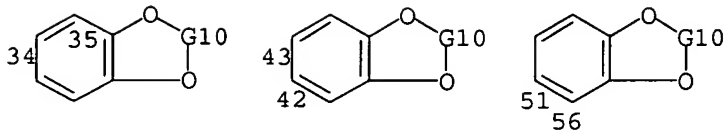


G6 = OH / 16 / alkoxy<(1-20)> / alkenyloxy<(2-20)> / (SC OMe)

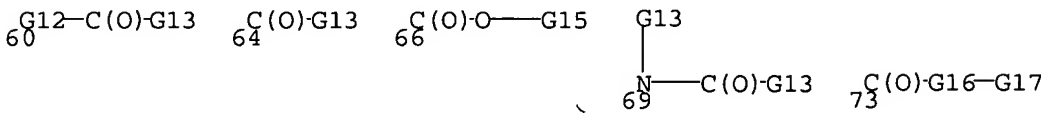
G7 = Na / K / R<TX "pharmaceutically acceptable counterion"> / Ca / Mg / NH3 / 23



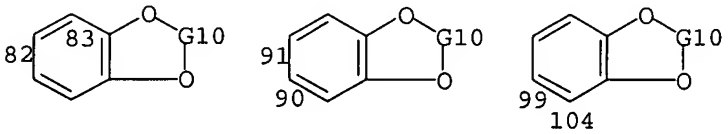
G8 = alkyl<(1-20)> / alkenyl<(2-20)>
G9 = **phenylene (SO (1-) G11)** / 35-32 34-10 / 43-32 42-10 / 51-32 56-10



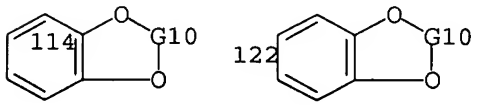
G10 = (1-2) CH2
G11 = 60 / **64** / CO2H / 66 / alkoxy<(1-20)> / alkenyloxy<(2-20)> / alkylamino<(1-20)> / alkenylamino<(2-20)> / 69 / CN / F / Cl / Br / I / OH / arylcarbonyl (SO) / 73 / (SC OMe)



G12 = O / NH
G13 = H / alkyl<(1-20)> / alkenyl<(2-20)>
G15 = alkyl<(1-20)> / alkenyl<(2-20)>
G16 = alkylene<(1-20)>
G17 = aryl (SO)
G19 = **phenylene (SO (1-) G11)** / 83-78 82-32 / 91-78 90-32 / 99-78 104-32

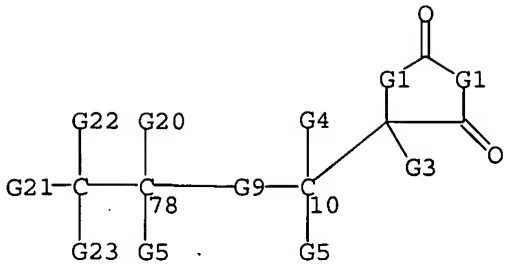


G20 = H
G21 = Ph (SO (1-) G11) / 114 / 122

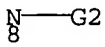


G22 = H
G23 = H / R
G3 +G4 = NULL
G20+G22= NULL
MPL: claim 1
NTE: substitution is restricted

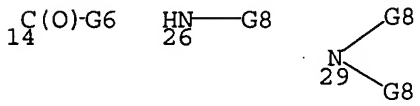
MSTR 1C



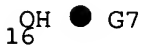
G1 = 8 / O / S



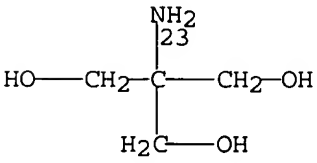
G2 = H / alkyl<(1-20)> / alkenyl<(2-20)>
G3 = H
G4 = H
G5 = H / Ak<EC (1-20) C, BD (0-) D (0) T> (SO) / 14 / NH2 / 26 / 29 / OH / alkoxy<(1-20)> / alkenyloxy<(2-20)> / F / Cl / Br / I



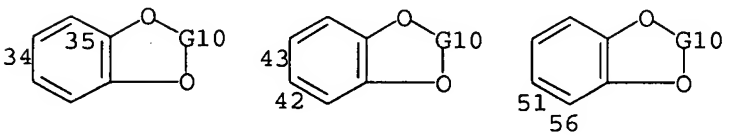
G6 = OH / 16 / alkoxy<(1-20)> / alkenyloxy<(2-20)> / (SC OMe)



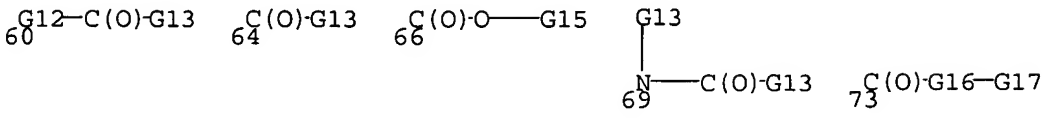
G7 = Na / K / R<TX "pharmaceutically acceptable counterion"> / Ca / Mg / NH3 / 23



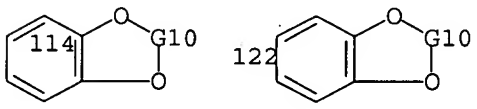
G8 = alkyl<(1-20)> / alkenyl<(2-20)>
G9 = phenylene (SO (1-) G11) / 35-78 34-10 / 43-78 42-10 / 51-78 56-10



G10 = (1-2) CH2
G11 = 60 / 64 / CO2H / 66 / alkoxy<(1-20)> / alkenyloxy<(2-20)> / alkylamino<(1-20)> / alkenylamino<(2-20)> / 69 / CN / F / Cl / Br / I / OH / arylcarbonyl (SO) / 73 / (SC OMe)



G12 = O / NH
G13 = H / alkyl<(1-20)> / alkenyl<(2-20)>
G15 = alkyl<(1-20)> / alkenyl<(2-20)>
G16 = alkylene<(1-20)>
G17 = aryl (SO)
G20 = H
G21 = Ph (SO (1-) G11) / 114 / 122



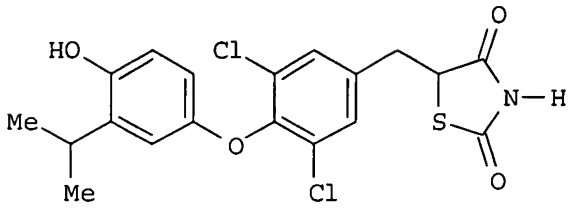
G22 = H
G23 = H / R
G3 +G4 = NULL
G20+G22= NULL
MPL: claim 1
NTE: substitution is restricted

L28 ANSWER 8 OF 10 MARPAT COPYRIGHT 2005 ACS on STN
AN 135:318502 MARPAT
TI Preparation of [(hydroxyphenoxy)benzyl]thiazolidinediones and analogs as thyroid receptor ligands
IN Chiang, Yuan-Ching P.
PA Pfizer Products Inc., USA
SO Eur. Pat. Appl., 51 pp.
CODEN: EPXXDW
DT Patent
LA English
IC ICM C07D271-06
ICS A61K031-4196; C07D277-34; C07D277-20; C07D249-12; A61K031-427; A61K031-4245; A61P003-04; A61P003-06; A61P009-10
CC 28-7 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1148054	A1	20011024	EP 2001-303490	20010417
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	US 2001051645	A1	20011213	US 2001-836765	20010417
	US 6620830	B2	20030916		
	CA 2344574	AA	20011021	CA 2001-2344574	20010419

	BR 2001001527	A	20011120	BR 2001-1527	20010419
	JP 2002053564	A2	20020219	JP 2001-121188	20010419
	US 2004110951	A1	20040610	US 2003-617436	20030711
PRAI	US 2000-199044P	20000421			
	US 2001-836765	20010417			

GI



I

AB R1Z1Z2ZR [R = 3,4-dioxothiazolidin-5-ylmethyl, 3,5-dioxo[1,2,4]oxadiazolidin-2-ylmethyl, etc.; R1 = OH, alkoxy, acyloxy, etc.; Z,Z1 = e.g., (un)substituted 1,4-phenylene; Z2 = O, SO0-2, CH2, CO, (alkyl)imino, etc.] were prepared as thyroid receptor ligands (no data). Thus, [3,4-(Me2HC)(MeO)C6H3]2IBF4 was etherified by 3,5,4-Cl2(HO)C6H3CO2Et and the reduced product condensed with 2,4-thiazolidinedione to give, in 3 addnl. steps, title compound I.

ST thiazolidinedione hydroxyphenoxybenzyl prepn thyroid receptor ligand; antiobesity agent thiazolidinedione hydroxyphenoxybenzyl prepn

IT Antiobesity agents
(preparation of [(hydroxyphenoxy)benzyl]thiazolidinediones and analogs as thyroid receptor ligands)

IT Thyroid gland
(receptors; preparation of [(hydroxyphenoxy)benzyl]thiazolidinediones and analogs as thyroid receptor ligands)

IT 322472-21-9P 322472-23-1P 367953-20-6P, 5-[3,5-Dichloro-4-(4-hydroxy-3-isopropylphenoxy)benzyl]thiazolidine-2,4-dione 367953-21-7P 367953-22-8P 367953-23-9P 367953-24-0P 367953-25-1P 367953-27-3P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of [(hydroxyphenoxy)benzyl]thiazolidinediones and analogs as thyroid receptor ligands)

IT 765-30-0, Cyclopropylamine 1426-58-0 2295-31-0, 2,4-Thiazolidinedione 2516-34-9, Cyclobutylamine 17302-82-8, 3,5-Dichloro-4-hydroxybenzoic acid ethyl ester 24603-68-7, [1,2,4]Oxadiazolidine-3,5-dione 156740-76-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of [(hydroxyphenoxy)benzyl]thiazolidinediones and analogs as thyroid receptor ligands)

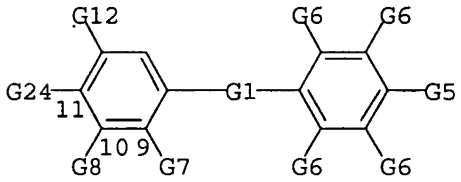
IT 219692-19-0P 367953-28-4P 367953-29-5P 367953-30-8P 367953-31-9P 367953-32-0P 367953-33-1P 367953-34-2P 367953-35-3P 367953-36-4P 367953-37-5P 367953-38-6P 367953-39-7P 367953-40-0P 367953-41-1P 367953-42-2P 367953-43-3P 367953-45-5P 367953-46-6P 367953-47-7P 367953-48-8P 367953-49-9P 367953-50-2P 367953-51-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of [(hydroxyphenoxy)benzyl]thiazolidinediones and analogs as thyroid receptor ligands)

RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD

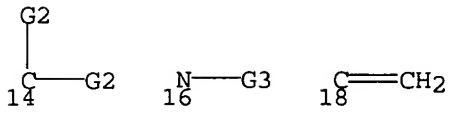
RE

(1) Adir; EP 0528734 A 1993 CAPLUS
(2) Anon; PATENT ABSTRACTS OF JAPAN 1992, V016(273), PC-0953
(3) de Nanteuil, G; ARZNEIM-FORSCH 1995, V45(11), P1176 CAPLUS
(4) Dow, R; J MED CHEM 1991, V34(5), P1538 CAPLUS
(5) Ebisawa, M; BIOL PHARM BULL 1998, V21(5), P547 CAPLUS
(6) Ebisawa, M; CHEM PHARM BULL 1999, V47(9), P1348 CAPLUS
(7) Hedfors Asa; WO 9900353 A 1999 CAPLUS
(8) Institute Of Medicinal Molecular Design Inc; WO 9924415 A 1999 CAPLUS
(9) Institute Of Medicinal Molecular Design Inc; EP 1048659 A 2000 CAPLUS
(10) Iyaku Bunshi Sekkei Kenkyusho K K; JP 2001031660 A 2001 CAPLUS
(11) Lilly Co Eli; EP 0587377 A 1994 CAPLUS
(12) Maxia Pharmaceuticals Inc; WO 0116123 A 2001 CAPLUS
(13) Sankyo Co; EP 0549365 A 1993 CAPLUS
(14) Yamanouchi Pharma Co Ltd; EP 0597102 A 1994 CAPLUS
(15) Yamanouchi Pharmaceut Co Ltd; JP 04066579 A 1992 CAPLUS
(16) Yamashita, Y; WO 0102377 A 2001 CAPLUS

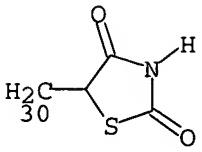
MSTR 1A

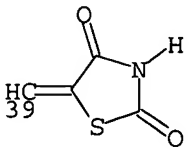


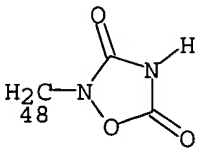
G1 = **O** / S / S(O) / SO2 / 14 / C(O) / CHOH / NH / 16 / 18

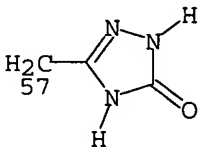


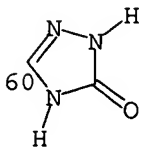
G2 = H / F
G3 = alkyl<(1-6)> (SO (1) G4)
G4 = cycloalkyl<(3-6)> / OMe
G5 = **30** / 39 / 48 / 57 / 60







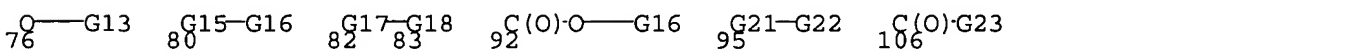


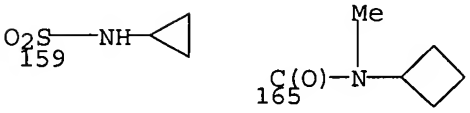


G6 = (2-) H / F / Cl / Br / I / alkyl<(1-8)> / **CF3** / OCF3 / alkoxy<(1-8)> / CN / (SC Me)
G7 = H / F / Cl / Br / I / alkyl<(1-8)> / CF3 / OCF3 /

alkoxy<(1-8)> / CN

G8 = H / alkyl<(1-8)> (SO) / alkenyl<(2-12)> / alkynyl<(2-12)> / F / Cl / Br / I / CN / OH / 76 / 82 / 80 / Ph (SO) / naphthyl (SO) / heteroaryl<EC (1-3) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (1-2)> (SO) / Cb<EC (3-10) C, AR (0), BD (0-) D> (SO) / Hy<EC (5-9) A (1-3) Q (0-) N (0-) O (0-) S (0) OTHERQ, AR (0), BD (0-) D, RC (1-2)> (SO) / CO2H / 92 / 95 / 106 / (SC Pr-i / 159 / 165)





G9 = (3-6) CH2 (SO)

G10 = (0-5) CH2 (SO)

G11 = O / S

G12 = H / F / Cl / Br / I / alkyl<(1-8)> / CF3 / OCF3 / alkoxy<(1-8)> / CN

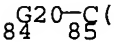
G13 = alkyl<(1-12)> (SO) / Ph (SO) / naphthyl (SO) / heteroaryl<EC (1-3) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (1-2)> (SO) / Cb<EC (3-10) C, AR (0), BD (0-) D> (SO) / Hy<EC (5-9) A (1-3) Q (0-) N (0-) O (0-) S (0) OTHERQ, AR (0), BD (0-) D, RC (1-2)> (SO) / 78

G14 = alkyl<(1-10)> (SO) / alkenyl<(2-12)> / alkynyl<(2-10)> / Cb<EC (3-10) C, AR (0), BD (0-) D> (SO) / Ph (SO) / naphthyl (SO) / heteroaryl<EC (1-3) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (1-2)> (SO) / Hy<EC (5-9) A (1-3) Q (0-) N (0-) O (0-) S (0) OTHERQ, AR (0), BD (0-) D, RC (1-2)> (SO)

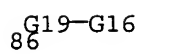
G15 = S / S(O) / SO2

G16 = alkyl<(1-12)> (SO) / alkenyl<(2-12)> / alkynyl<(2-12)> / Ph (SO) / naphthyl (SO) / heteroaryl<EC (1-3) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (1-2)> (SO) / Cb<EC (3-10) C, AR (0), BD (0-) D> (SO) / Hy<EC (5-9) A (1-3) Q (0-) N (0-) O (0-) S (0) OTHERQ, AR (0), BD (0-) D, RC (1-2)> (SO)

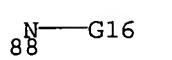
G17 = 84-10 85-83 / SO2 / C(O)



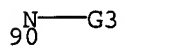
G18 = NH2 / 86 / Hy<EC (3-10) A (1-2) Q (1-) N (0-) O (0-) S (0) OTHERQ, AN (1-) N> (SO)



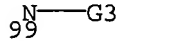
G19 = NH / 88



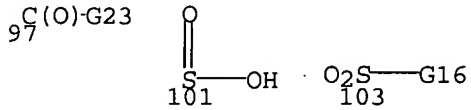
G20 = O / NH / 90



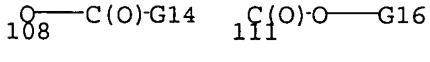
G21 = NH / 99



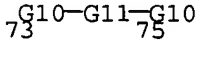
G22 = 97 / 101 / 103



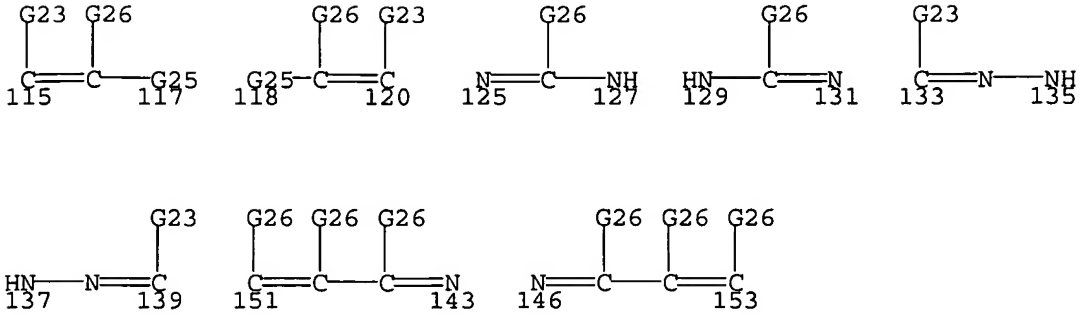
G23 = H / alkyl<(1-12)> (SO) / alkenyl<(2-12)> /
alkynyl<(2-12)> / Ph. (SO) / naphthyl (SO) /
heteroaryl<EC (1-3) Q (0-) N (0-) O (0-) S (0) OTHERQ,
RC (1-2)> (SO) / Cb<EC (3-10) C, AR (0), BD (0-) D> (SO) /
Hy<EC (5-9) A (1-3) Q (0-) N (0-) O (0-) S (0) OTHERQ,
AR (0), BD (0-) D, RC (1-2)> (SO)
G24 = OH / alkoxy<(1-6)> / 108 / F / CO2H / 111 / (SC OMe)



G25 = NH / O / S
G26 = H / alkyl<(1-6)> (SO (1) G4)
G7 +G8 = G9 / 73-9 75-10

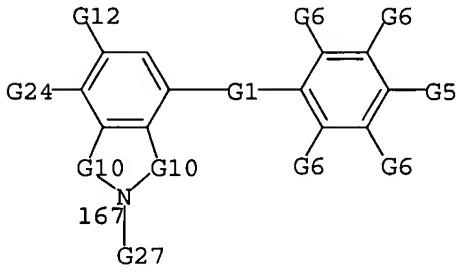


G8 +G24= 115-10 117-11 / 118-10 120-11 / 125-10 127-11 /
129-10 131-11 / 133-10 135-11 / 137-10 139-11 /
151-10 143-11 / 146-10 153-11

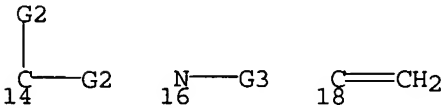


MPL: claim 1
NTE: and prodrugs and pharmaceutically acceptable salts
NTE: substitution is restricted
NTE: additional oxo substitution also claimed
STE: and stereoisomers

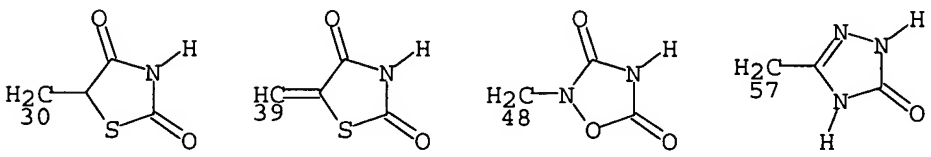
MSTR 1B

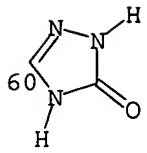


G1 = **O** / S / S(O) / SO2 / 14 / C(O) / CHOH / NH / 16 / 18



G2 = H / F
G3 = alkyl<(1-6)> (SO (1) G4)
G4 = cycloalkyl<(3-6)> / OMe
G5 = **30** / 39 / 48 / 57 / 60





G6 = (2-) H / F / Cl / Br / I / alkyl<(1-8)> / **CF3** / OCF3 / alkoxy<(1-8)> / CN / (SC Me)
G10 = (0-5) CH2 (SO)
G12 = H / F / Cl / Br / I / alkyl<(1-8)> / CF3 / OCF3 / alkoxy<(1-8)> / CN
G14 = alkyl<(1-10)> (SO) / alkenyl<(2-12)> / alkynyl<(2-10)> / Cb<EC (3-10) C, AR (0), BD (0-) D> (SO) / Ph (SO) / naphthyl (SO) / heteroaryl<EC (1-3) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (1-2)> (SO) / Hy<EC (5-9) A (1-3) Q (0-) N (0-) O (0-) S (0) OTHERQ, AR (0), BD (0-) D, RC (1-2)> (SO)
G16 = alkyl<(1-12)> (SO) / alkenyl<(2-12)> / alkynyl<(2-12)> / Ph (SO) / naphthyl (SO) / heteroaryl<EC (1-3) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (1-2)> (SO) / Cb<EC (3-10) C, AR (0), BD (0-) D> (SO) / Hy<EC (5-9) A (1-3) Q (0-) N (0-) O (0-) S (0) OTHERQ, AR (0), BD (0-) D, RC (1-2)> (SO)
G20 = O / NH / 90

90 N—G3

G24 = OH / alkoxy<(1-6)> / 108 / F / CO2H / 111 / (SC OMe)

108 O—C(O)-G14 111 C(O)-O—G16

G27 = H / CN / alkyl<(1-10)> (SO) / alkenyl<(2-10)> / alkoxy<(2-10)> / Cb<EC (3-10) C, AR (0), BD (0-) D> (SO) / Ph / naphthyl / Cb<EC (6-10) C, AR (1-), BD (ALL) N, RC (1-2), RS (1-2) E6 (0) OTHER> (SO) / heteroaryl<EC (1-3) Q (0-) N (0-) O (0-) S (0) OTHERQ, RC (1-2)> (SO) / 169 / 171 / 174 / 176

169 C(O)-G28 171 C(O)-G20—G28 174 O2S—G28 176 177 G29—G30

G28 = alkyl<(1-10)> (SO) / alkenyl<(2-12)> / alkynyl<(2-10)>
G29 = C(O) / 178-167 179-177 / SO2

178 179 C(O)-G20

G30 = Cb<EC (3-10) C, AR (0), BD (0-) D> (SO) / Ph / naphthyl / Cb<EC (6-10) C, AR (1-), BD (ALL) N, RC (1-2), RS (1-2) E6 (0) OTHER> (SO) / heteroaryl<EC (1-3) Q (0-)

N (0-) O (0-) S (0) OTHERQ, RC (1-2)> (SO) /
Hy<EC (5-9) A (1-3) Q (0-) N (0-) O (0-) S (0) OTHERQ,
AR (0), BD (0-) D, RC (1-2)> (SO)
MPL: claim 1
NTE: and prodrugs and pharmaceutically acceptable salts
NTE: substitution is restricted
NTE: additional oxo substitution also claimed
STE: and stereoisomers

L28 ANSWER 9 OF 10 MARPAT COPYRIGHT 2005 ACS on STN
AN 131:332116 MARPAT
TI Heterocyclic analogs of diphenylethylene compounds for the treatment of diabetes
IN Neogi, Partha; Nag, Bishwajit; Medicherla, Satyanarayana; Dey, Debendranath
PA Calyx Therapeutics, Inc., USA
SO PCT Int. Appl., 34 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K031-425
CC 1-10 (Pharmacology)
Section cross-reference(s): 63
FAN.CNT 9

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9958127	A1	19991118	WO 1999-US9982	19990507
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	RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 6245814	B1	20010612	US 1998-74925	19980508
	CA 2295599	AA	19991118	CA 1999-2295599	19990507
	AU 9939741	A1	19991129	AU 1999-39741	19990507
	AU 751235	B2	20020808		
	EP 1007039	A1	20000614	EP 1999-922836	19990507
	EP 1007039	B1	20040303		
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	JP 2002514598	T2	20020521	JP 2000-547978	19990507
	AT 260906	E	20040315	AT 1999-922836	19990507
	HK 1028348	A1	20040903	HK 2000-107853	20001207

PRAI US 1998-74925 19980508
US 1999-287237 19990406
WO 1999-US9982 19990507

AB Diphenylethylene compds. containing thiazolidinedione or oxazolidinedione moieties are provided which are effective in lowering blood glucose level, serum insulin, triglyceride and free fatty acid levels in animal models of Type II diabetes. In contrast to previously reported thiazolidine compds., known to lower leptin levels, the present compds. increase leptin levels and have no known liver toxicity.
ST diphenylethylene thiazolidinedione oxazolidinedione deriv antidiabetic
IT Hemoglobins
RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological

study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(glycohemoglobins; heterocyclic analogs of diphenylethylene compds. for treatment of diabetes)

IT Antidiabetic agents
Drug delivery systems
Hypolipemic agents
(heterocyclic analogs of diphenylethylene compds. for treatment of diabetes)

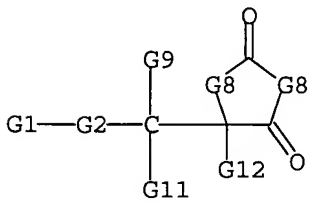
IT Fatty acids, biological studies
Glycerides, biological studies
RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(heterocyclic analogs of diphenylethylene compds. for treatment of diabetes)

IT 249886-47-3
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(heterocyclic analogs of diphenylethylene compds. for treatment of diabetes)

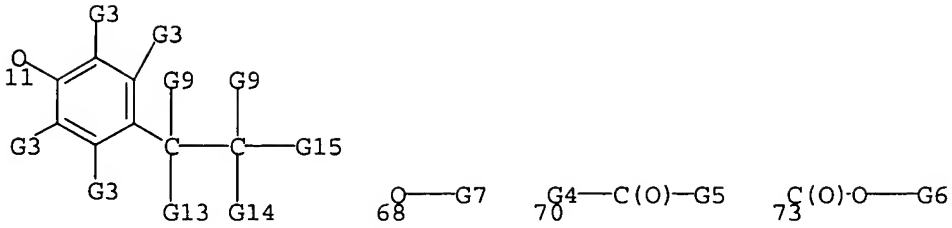
IT 50-99-7, D-Glucose, biological studies 9004-10-8, Insulin, biological studies 169494-85-3, Leptin
RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(heterocyclic analogs of diphenylethylene compds. for treatment of diabetes)

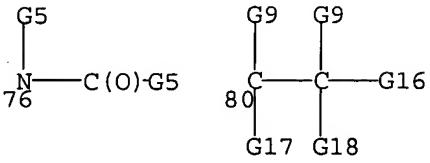
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Klaus; US 5250562 A 1993 CAPLUS
(2) Klaus; US 5378705 A 1995 CAPLUS
(3) Treacy; US 5246936 A 1993 CAPLUS

MSTR 1

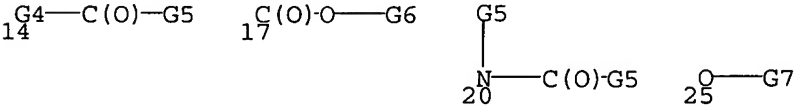


G1 = **11** / H / OH / 70 / alkylcarbonyl<(1-19)> / CHO / 73 / alkoxy<(1-20)> / alkylamino<(1-20)> / 76 / CO2H / CN / X / OH / 68 / 80

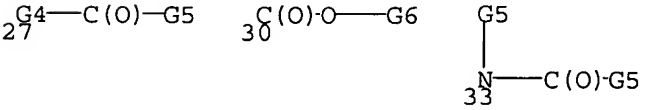




G2 = **phenylene (SR (1-) G3)**
G3 = H / 14 / **alkylcarbonyl<(1-19)>** / CHO / 17 / alkoxy<(1-20)> / alkylamino<(1-20)> / 20 / CO2H / CN / X / OH / 25 / (SC OMe)



G4 = O / NH
G5 = H / alkyl<(1-20)> / alkenyl<(2-20)>
G6 = alkyl<(1-20)> / alkenyl<(2-20)>
G7 = 27 / alkylcarbonyl<(1-19)> / CHO / alkenylcarbonyl<(2-20)> / 30 / alkoxy<(1-20)> / alkylamino<(1-20)> / 33 / arylcarbonyl / aralkylcarbonyl / CO2H / CN / X / OH



G8 = **44** / O / **S**

G9 = H / R / (SC CO2Me)
G11 = H
G12 = H
G13 = H
G14 = H
G15 = Ph (SR (1-) G3)
G16 = Ph (SR (1-) G3)
G17 = H

G18 = H
G11+G12= NULL
G13+G14= NULL
G17+G18= NULL
MPL: claim 1

L28 ANSWER 10 OF 10 MARPAT COPYRIGHT 2005 ACS on STN
AN 126:251153 MARPAT
TI Process for preparing benzyl-substituted rhodanine derivatives
IN Copp, James Densmore; Ginah, Francis Orerenyo; Hansen, Marvin Martin; Kjell, Douglas Patton; Slattery, Brian James
PA Eli Lilly and Co., USA
SO Eur. Pat. Appl., 13 pp.
CODEN: EPXXDW
DT Patent
LA English
IC ICM C07D277-14
ICS C07C323-60
CC 28-7 (Heterocyclic Compounds (More Than One Hetero Atom))
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 761657	A1	19970312	EP 1996-306338	19960902
	EP 761657	B1	20000524		
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	AT 193284	E	20000615	AT 1996-306338	19960902
	ES 2146837	T3	20000816	ES 1996-306338	19960902
	CA 2230993	AA	19970313	CA 1996-2230993	19960903
	WO 9709305	A1	19970313	WO 1996-US14101	19960903
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	RW: KE, LS, MW, SD, SZ, UG, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
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	CN 1201451	A	19981209	CN 1996-198097	19960903
	CN 1073094	B	20011017		
	BR 9610392	A	19990706	BR 1996-10392	19960903
	JP 11514977	T2	19991221	JP 1996-511327	19960903
	TR 9903176	T2	20000321	TR 1999-9903176	19960903
	NZ 337361	A	20000825	NZ 1996-337361	19960903
	SG 84520	A1	20011120	SG 1999-1063	19960903
	US 6005142	A	19991221	US 1998-29476	19980225
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	NO 309604	B1	20010226		
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	US 1998-29476	19980225			

OS CASREACT 126:251153
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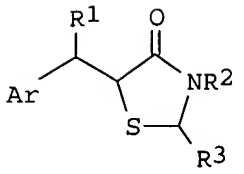

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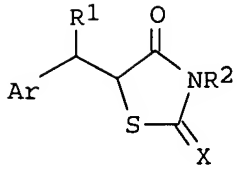

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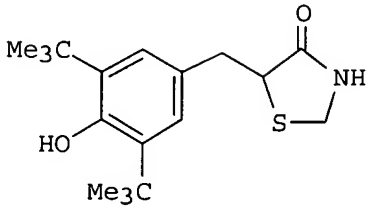


III

AB Rhodanine derivs. I [Ar = (un)substituted Ph, 1-, 2-naphthyl; R1 = H, alkyl, alkylphenyl, (un)substituted Ph; R2 = H, alkyl, CH2Ph, CHMePh; R3 = H, alkyl, (un)substituted Ph, 1-, 2-naphthyl] were prepared via reaction of thiazolidinones II (X = S, NH, O) with R3CHO in the presence of R6NH2 (R6 = H, alkyl, CH2Ph, CHMePh). Thus, thiazolidinone III was prepared via condensation of 4,3,5-HO(Me3C)2C6H2CHO with 2,4-thiazolidinedione, hydrogenation and reaction with formalin in MeOH containing NH3. ArCHR1CH(SR5)CONHR2 [R5 = H, CH(OH)R3] were also prepared

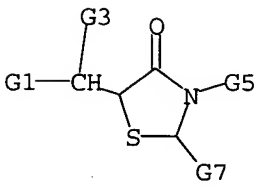
ST rhodanine benzyl deriv prepn; thiazolidinone condensation aldehyde

IT 1620-98-0 2295-31-0, 2,4-Thiazolidinedione 107902-68-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of benzylrhodanine derivs. via condensation of thiazolidinones with aldehydes)

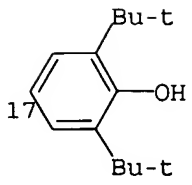
IT 127378-46-5P 188532-19-6P 188532-26-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of benzylrhodanine derivs. via condensation of thiazolidinones with aldehydes)

IT 107902-67-0P 188532-21-0P 188532-24-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of benzylrhodanine derivs. via condensation of thiazolidinones with aldehydes)

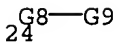
MSTR 1



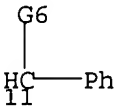
G1 = Ph (SO (1-3) G2) / naphthyl / (SC 17)



G2 = alkyl<(1-8)> / alkenyl<(2-6)> / alkynyl<(2-6)> / 24 / CF3 / Ph (SO alkyl<(1-4)>) / F / Cl / OH / dialkylamino<(1-6)>

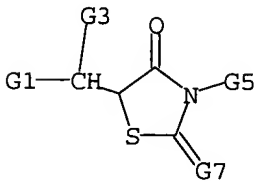


G3 = H / alkyl<(1-6)> / Ph (SO (1-2) G4)
G4 = Cl / F / alkyl<(1-4)> / alkoxy<(1-4)> / CF3 / dialkylamino<(1-4)> / alkylthio<(1-4)>
G5 = H / alkyl<(1-6)> / 11

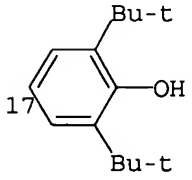


G6 = H / Me
G7 = H / alkyl<(1-6)> / Ph (SO (1-3) G2) / naphthyl
G8 = O / S
G9 = alkyl<(1-8)> / Ph (SO alkyl<(1-4)>)
MPL: claim 1

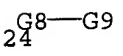
MSTR 2



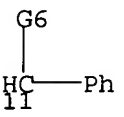
G1 = **Ph (SO (1-3) G2)** / naphthyl / (SC 17)



G2 = alkyl<(1-8)> / alkenyl<(2-6)> / alkynyl<(2-6)> / 24 / **CF3** / Ph (SO alkyl<(1-4)>) / F / Cl / OH / dialkylamino<(1-6)>

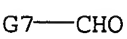


G3 = H / alkyl<(1-6)> / Ph (SO (1-2) G4)
G4 = Cl / F / alkyl<(1-4)> / alkoxy<(1-4)> / CF3 / dialkylamino<(1-4)> / alkylthio<(1-4)>
G5 = H / alkyl<(1-6)> / 11

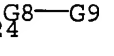


G6 = H / Me
G7 = S / NH / O
G8 = O / S
G9 = alkyl<(1-8)> / **Ph (SO alkyl<(1-4)>)**
MPL: claim 1

MSTR 3

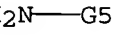


G2 = alkyl<(1-8)> / alkenyl<(2-6)> / alkynyl<(2-6)> / 24 / CF3 / Ph (SO alkyl<(1-4)>) / F / Cl / OH / dialkylamino<(1-6)>

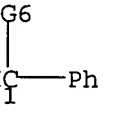


G7 = H / alkyl<(1-6)> / Ph (SO (1-3) G2) / naphthyl
G8 = O / S
G9 = alkyl<(1-8)> / Ph (SO alkyl<(1-4)>)
MPL: claim 1

MSTR 4

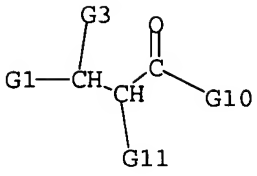


G5 = H / alkyl<(1-6)> / 11

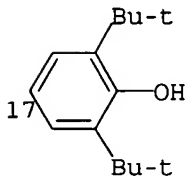


G6 = H / Me
MPL: claim 1

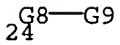
MSTR 5



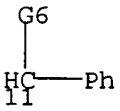
G1 = Ph (SO (1-3) G2) / naphthyl / (SC 17)



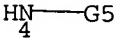
G2 = alkyl<(1-8)> / alkenyl<(2-6)> / alkynyl<(2-6)> / 24 / CF3 / Ph (SO alkyl<(1-4)>) / F / Cl / OH / dialkylamino<(1-6)>



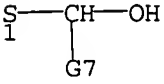
G3 = H / alkyl<(1-6)> / Ph (SO (1-2) G4)
G4 = Cl / F / alkyl<(1-4)> / alkoxy<(1-4)> / CF3 / dialkylamino<(1-4)> / alkylthio<(1-4)>
G5 = alkyl<(1-6)> / 11



G6 = H / Me
G7 = H / alkyl<(1-6)> / Ph (SO (1-3) G2) / naphthyl
G8 = O / S
G9 = alkyl<(1-8)> / Ph (SO alkyl<(1-4)>)
G10 = NH2 / 4



G11 = SH / 1



MPL: claim 5

=> d ibib abs hitstr l10 1-1

L10 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:589256 HCAPLUS
DOCUMENT NUMBER: 141:140764
TITLE: Preparation of amino acid phenoxy ethers as inhibitors of cytokines
INVENTOR(S): **Nag, Bishwajit; Nag, Abhijeet; Dey, Debendranath**; Agarwal, Shiv Kumar
PATENT ASSIGNEE(S): Bexel Pharmaceuticals, Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 47 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004142991	A1	20040722	US 2003-356113	20030131
US 6794401	B2	20040921		
WO 2004066964	A2	20040812	WO 2004-US790	20040113
WO 2004066964	C2	20040902		
WO 2004066964	A3	20050224		

W: AE, AE, AG, AL, AL, AM, AM, AM, AT, AT, AU, AZ, AZ, BA, BB, BG, BG, BR, BR, BW, BY, BY, BZ, BZ, CA, CH, CN, CN, CO, CO, CR, CR, CU, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EC, EE, EE, EG, ES, ES, FI, FI, GB, GD, GE, GE, GH, GM, HR, HR, HU, HU, ID, IL, IN, IS, JP, JP, KE, KE, KG, KG, KP, KP, KP, KR, KR, KZ, KZ, KZ, LC, LK, LR, LS, LS, LT, LU, LV, MA, MD, MD, MG, MK, MN, MW, MX, MX, MZ, MZ, NA, NI

PRIORITY APPLN. INFO.: US 2003-440772P P 20030117
US 2003-356113 A 20030131
OTHER SOURCE(S): MARPAT 141:140764
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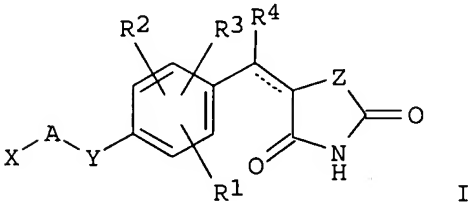


I

AB Novel amino acid **Ph ethers**, e.g. tyrosine **Ph ethers**, or tautomeric forms, stereoisomers, polymorphs, pharmaceutically acceptable salts, or pharmaceutically acceptable solvates thereof [I; wherein the dotted line represents an optional double bond; Y = O, S, NR (wherein R represents hydrogen or alkyl); Z = O, S; R1-R4 = H, halogen, HO, nitro, cyano, formyl, amino, alkyl, alkoxy; A = a bond or substituted or unsubstituted aryl, heterocyclyl or heteroaryl ring; X = an alpha aminocarboxylic acid or alpha aminocarboxylic acid derivative bonded to A or Y through its alpha side chain] are prepared Also provided are a method for reducing glucose, free fatty acids, cholesterol, or triglyceride levels in plasma,. These compds. inhibit cytokines such as TNFα, IL-6, and IL-1β and exhibit activity for the treatment of

immunol. diseases mediated by cytokines, autoimmune diseases such as multiple sclerosis and rheumatoid arthritis, inflammation mediated by cyclooxygenase, obesity, hyperlipidemia, hypertension, neurol. diseases and diabetes, or a disorder associated with insulin resistance. Unlike other thiazolidine-compds. (TZD mols.), the compds. I exhibit no adipocyte differentiation, reduce body weight gain, and appear to have no affinity for PPAR-g and thereby are different from known TZD mols., which typically have adipocyte differentiation activity, increase weight gain, and are PPAR-g agonists. Thus, Me 2-[(tert-butoxycarbonyl)amino]-3-(4-hydroxyphenyl)propanoate was treated with NaH in DMF and etherified with 4-Fluorobenzaldehyde at 80° to give Me 2-[(tert-butoxycarbonyl)amino]-3-[-(4-formylphenoxy)phenyl]propanoate which was condensed with 2,4-thiazolidinedione in the presence of benzoic acid and piperidine at 145-155° under reflux with continuous removal of water using Dean-Stark apparatus for 5 h followed by treatment with HCl in CH2Cl2 to give 5-[4-[4-(2-amino-2-methoxycarbonylethyl)phenoxy]benzylidene]thiazolidine-2,4-dione hydrochloride (II). Catalytic hydrogenation of II over Pd/C in methanol gave 5-[4-[4-(2-amino-2-methoxycarbonylethyl)phenoxy]benzyl]thiazolidine-2,4-dione (III). III lowered pro-inflammatory cytokines in human macrophage cells and in an animal model of inflammation inhibited carrageenan-induced paw edema in SD rats.

IT **9004-10-8**, Insulin, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(disorders associated with insulin resistance; preparation of tyrosine thiazolidinylmethylphenyl ether derivs. for treatment of immunol. diseases, inflammation, obesity, hyperlipidemia, hypertension, neurol. diseases, and diabetes)
RN 9004-10-8 HCAPLUS
CN Insulin (9CI) (CA INDEX NAME)

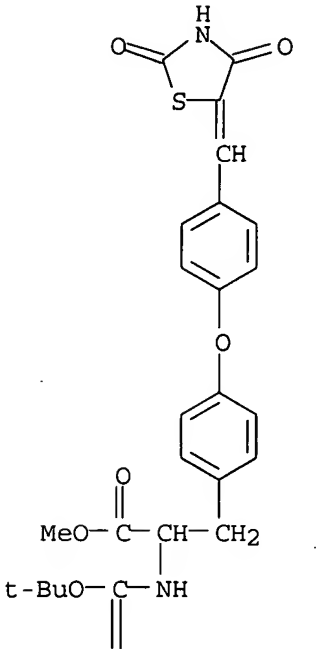
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT **39391-18-9**, Cyclooxygenase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitors; preparation of tyrosine thiazolidinylmethylphenyl ether derivs. for treatment of immunol. diseases, inflammation, obesity, hyperlipidemia, hypertension, neurol. diseases, and diabetes)
RN 39391-18-9 HCAPLUS
CN Synthetase, prostaglandin endoperoxide (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

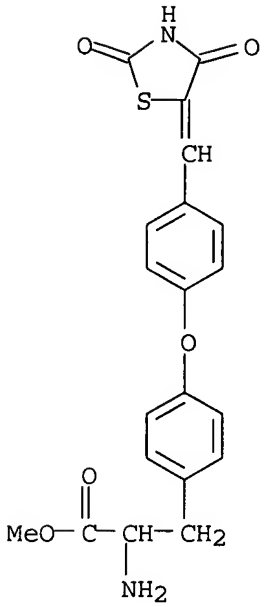
IT **724760-26-3P**, 5-[4-[4-(2-tert-Butoxycarbonylamino-2-methoxycarbonylethyl)phenoxy]benzylidene]thiazolidine-2,4-dione
724760-27-4P, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]benzylidene]thiazolidine-2,4-dione
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(intermediate; preparation of tyrosine thiazolidinylmethylphenyl ether derivs. for treatment of immunol. diseases, inflammation, obesity, hyperlipidemia, hypertension, neurol. diseases, and diabetes)
RN 724760-26-3 HCAPLUS
CN Tyrosine, N-[(1,1-dimethylethoxy)carbonyl]-O-[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

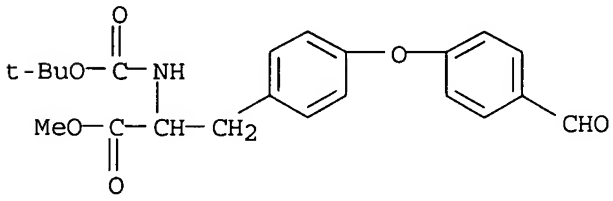


PAGE 2-A

RN 724760-27-4 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



IT **724760-25-2P**, Methyl 2-[(tert-butoxycarbonyl)amino]-3-[4-(4-formylphenoxy)phenyl]propanoate
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of tyrosine thiazolidinylmethylphenyl ether derivs. for treatment of immunol. diseases, inflammation, obesity, hyperlipidemia, hypertension, neurol. diseases, and diabetes)
RN 724760-25-2 HCAPLUS
CN Tyrosine, N-[(1,1-dimethylethoxy)carbonyl]-O-(4-formylphenyl)-, methyl ester (9CI) (CA INDEX NAME)



IT **724760-24-1P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]benzyl]thiazolidine-2,4-dione hydrochloride **724760-28-5P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]benzyl]thiazolidine-2,4-dione **724760-29-6P**, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]benzylidene]thiazolidine-2,4-dione **724760-30-9P**, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]benzyl]thiazolidine-2,4-dione **724760-31-0P**, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]benzylidene]oxazolidine-2,4-dione **724760-32-1P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]benzylidene]oxazolidine-2,4-dione **724760-33-2P**, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]benzyl]oxazolidine-2,4-dione **724760-34-3P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]benzyl]oxazolidine-2,4-dione **724760-35-4P**, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-2,6-difluorobenzylidene]oxazolidine-2,4-dione **724760-36-5P**,

5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-2,6-difluorobenzylidene]oxazolidine-2,4-dione **724760-37-6P**, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-2,6-difluorobenzyl]oxazolidine-2,4-dione **724760-38-7P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-2,6-difluorobenzyl]oxazolidine-2,4-dione **724760-39-8P**, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-2,6-difluorobenzylidene]thiazolidine-2,4-dione **724760-40-1P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-2,6-difluorobenzylidene]thiazolidine-2,4-dione **724760-41-2P**, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-2,6-difluorobenzyl]thiazolidine-2,4-dione **724760-42-3P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-2,6-difluorobenzyl]thiazolidine-2,4-dione **724760-43-4P**, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-2,3-difluorobenzylidene]thiazolidine-2,4-dione **724760-44-5P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-2,3-difluorobenzylidene]thiazolidine-2,4-dione **724760-45-6P**, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-2,3-difluorobenzyl]thiazolidine-2,4-dione **724760-46-7P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-2,3-difluorobenzyl]thiazolidine-2,4-dione **724760-47-8P**, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-2,3-difluorobenzylidene]oxazolidine-2,4-dione **724760-49-0P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-2,3-difluorobenzylidene]oxazolidine-2,4-dione **724760-50-3P**, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-2,3-difluorobenzyl]oxazolidine-2,4-dione **724760-51-4P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-2,3-difluorobenzyl]oxazolidine-2,4-dione **724760-52-5P**, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-3-methylbenzylidene]oxazolidine-2,4-dione **724760-53-6P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-3-methylbenzylidene]oxazolidine-2,4-dione **724760-55-8P**, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-3-methylbenzyl]oxazolidine-2,4-dione **724760-56-9P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-3-methylbenzyl]oxazolidine-2,4-dione **724760-58-1P**, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-3-methylbenzylidene]thiazolidine-2,4-dione **724760-59-2P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-3-methylbenzylidene]thiazolidine-2,4-dione **724760-60-5P**, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-3-methylbenzyl]thiazolidine-2,4-dione **724760-61-6P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-3-methylbenzyl]thiazolidine-2,4-dione **724760-62-7P**, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-3-nitrobenzylidene]thiazolidine-2,4-dione **724760-63-8P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-3-nitrobenzylidene]thiazolidine-2,4-dione **724760-64-9P**, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-3-nitrobenzyl]thiazolidine-2,4-dione **724760-65-0P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-3-nitrobenzyl]thiazolidine-2,4-dione **724760-66-1P**, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-3-nitrobenzylidene]oxazolidine-2,4-dione **724760-67-2P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-3-nitrobenzylidene]oxazolidine-2,4-dione **724760-68-3P**, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-3-nitrobenzyl]oxazolidine-2,4-dione **724760-69-4P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-3-nitrobenzyl]oxazolidine-2,4-dione **724760-70-7P**, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-3-aminobenzylidene]thiazolidine-2,4-dione **724760-71-8P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-3-aminobenzylidene]thiazolidine-2,4-dione **724760-72-9P**, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-3-aminobenzyl]thiazolidine-2,4-

dione **724760-73-0P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-3-aminobenzyl]thiazolidine-2,4-dione **724760-74-1P**, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-3-aminobenzylidene]oxazolidine-2,4-dione **724760-75-2P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-3-aminobenzylidene]oxazolidine-2,4-dione **724760-76-3P**, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-3-aminobenzyl]oxazolidine-2,4-dione **724760-77-4P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-3-aminobenzyl]oxazolidine-2,4-dione **724760-78-5P**, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-2-fluorobenzylidene]thiazolidine-2,4-dione **724760-79-6P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-2-fluorobenzylidene]thiazolidine-2,4-dione **724760-80-9P**, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-2-fluorobenzyl]thiazolidine-2,4-dione **724760-81-0P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-2-fluorobenzyl]thiazolidine-2,4-dione **724760-82-1P**, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-2-fluorobenzylidene]oxazolidine-2,4-dione **724760-83-2P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-2-fluorobenzylidene]oxazolidine-2,4-dione **724760-84-3P**, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-2-fluorobenzyl]oxazolidine-2,4-dione **724760-85-4P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-2-fluorobenzyl]oxazolidine-2,4-dione **724760-86-5P**, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-3-fluorobenzylidene]thiazolidine-2,4-dione **724760-87-6P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-3-fluorobenzylidene]thiazolidine-2,4-dione **724760-88-7P**, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-3-fluorobenzyl]thiazolidine-2,4-dione **724760-89-8P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-3-fluorobenzyl]thiazolidine-2,4-dione **724760-90-1P**, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-3-fluorobenzylidene]oxazolidine-2,4-dione **724760-91-2P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-3-fluorobenzylidene]oxazolidine-2,4-dione **724760-92-3P**, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-3-fluorobenzyl]oxazolidine-2,4-dione **724760-93-4P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-3-fluorobenzyl]oxazolidine-2,4-dione **724760-94-5P**, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-2-trifluoromethylbenzylidene]thiazolidine-2,4-dione **724760-95-6P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-2-trifluoromethylbenzylidene]thiazolidine-2,4-dione **724760-96-7P**, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-2-trifluoromethylbenzyl]thiazolidine-2,4-dione **724760-97-8P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-2-trifluoromethylbenzyl]thiazolidine-2,4-dione **724760-98-9P**, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-2-trifluoromethylbenzylidene]oxazolidine-2,4-dione **724760-99-0P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-2-trifluoromethylbenzylidene]oxazolidine-2,4-dione **724761-00-6P**, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-2-trifluoromethylbenzyl]oxazolidine-2,4-dione **724761-01-7P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-2-trifluoromethylbenzyl]oxazolidine-2,4-dione **724761-02-8P**, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-3-trifluoromethylbenzylidene]thiazolidine-2,4-dione **724761-03-9P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-3-trifluoromethylbenzylidene]thiazolidine-2,4-dione **724761-04-0P**, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-3-trifluoromethylbenzyl]thiazolidine-2,4-dione **724761-05-1P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)phenoxy]-3-trifluoromethylbenzyl]thiazolidine-2,4-dione **724761-06-2P**, 5-[4-[4-(2-Amino-2-carboxyethyl)phenoxy]-3-

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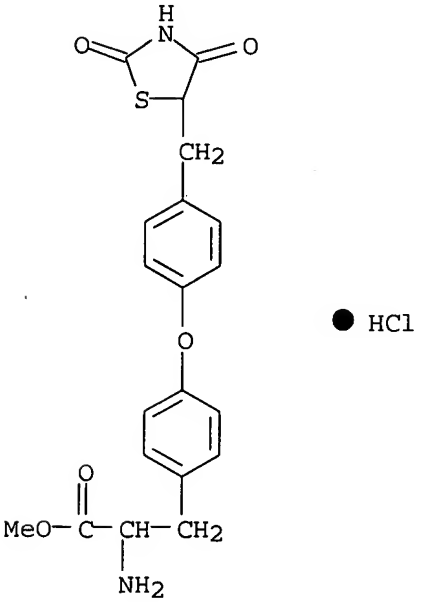
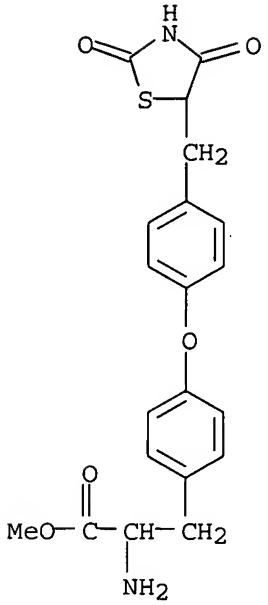
lidine-2,4-dione **724761-44-8P**, 5-[4-[4-(2-Amino-2-carboxyethyl)-3-aminophenoxy]benzyl]thiazolidine-2,4-dione **724761-45-9P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-3-aminophenoxy]benzyl]thiazolidine-2,4-dione **724761-46-0P**, 5-[4-[4-(2-Amino-2-carboxyethyl)-3-aminophenoxy]benzylidene]oxazolidine-2,4-dione **724761-47-1P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-3-aminophenoxy]benzylidene]oxazolidine-2,4-dione **724761-48-2P**, 5-[4-[4-(2-Amino-2-carboxyethyl)-3-aminophenoxy]benzyl]oxazolidine-2,4-dione **724761-49-3P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-3-aminophenoxy]benzyl]oxazolidine-2,4-dione **724761-50-6P**, 5-[4-[4-(2-Amino-2-carboxyethyl)-2-fluorophenoxy]benzylidene]thiazolidine-2,4-dione **724761-51-7P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-2-fluorophenoxy]benzylidene]thiazolidine-2,4-dione **724761-52-8P**, 5-[4-[4-(2-Amino-2-carboxyethyl)-2-fluorophenoxy]benzyl]thiazolidine-2,4-dione **724761-53-9P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-2-fluorophenoxy]benzyl]thiazolidine-2,4-dione **724761-54-0P**, 5-[4-[4-(2-Amino-2-carboxyethyl)-2-fluorophenoxy]benzylidene]oxazolidine-2,4-dione **724761-55-1P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-2-fluorophenoxy]benzylidene]oxazolidine-2,4-dione **724761-56-2P**, 5-[4-[4-(2-Amino-2-carboxyethyl)-2-fluorophenoxy]benzyl]oxazolidine-2,4-dione **724761-57-3P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-2-fluorophenoxy]benzyl]oxazolidine-2,4-dione **724761-58-4P**, 5-[4-[4-(2-Amino-2-carboxyethyl)-3-fluorophenoxy]benzylidene]thiazolidine-2,4-dione **724761-59-5P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-3-fluorophenoxy]benzylidene]thiazolidine-2,4-dione **724761-60-8P**, 5-[4-[4-(2-Amino-2-carboxyethyl)-3-fluorophenoxy]benzyl]thiazolidine-2,4-dione **724761-61-9P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-3-fluorophenoxy]benzyl]thiazolidine-2,4-dione **724761-63-1P**, 5-[4-[4-(2-Amino-2-carboxyethyl)-3-fluorophenoxy]benzylidene]oxazolidine-2,4-dione **724761-64-2P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-3-fluorophenoxy]benzylidene]oxazolidine-2,4-dione **724761-65-3P**, 5-[4-[4-(2-Amino-2-carboxyethyl)-3-fluorophenoxy]benzyl]oxazolidine-2,4-dione **724761-66-4P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-3-fluorophenoxy]benzyl]oxazolidine-2,4-dione **724761-67-5P**, 5-[4-[4-(2-Amino-2-carboxyethyl)-2-trifluoromethylphenoxy]benzylidene]thiazolidine-2,4-dione **724761-68-6P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-2-trifluoromethylphenoxy]benzylidene]thiazolidine-2,4-dione **724761-69-7P**, 5-[4-[4-(2-Amino-2-carboxyethyl)-2-trifluoromethylphenoxy]benzyl]thiazolidine-2,4-dione **724761-70-0P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-2-trifluoromethylphenoxy]benzyl]thiazolidine-2,4-dione **724761-71-1P**, 5-[4-[4-(2-Amino-2-carboxyethyl)-2-trifluoromethylphenoxy]benzylidene]oxazolidine-2,4-dione **724761-72-2P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-2-trifluoromethylphenoxy]benzylidene]oxazolidine-2,4-dione **724761-73-3P**, 5-[4-[4-(2-Amino-2-carboxyethyl)-2-trifluoromethylphenoxy]benzyl]oxazolidine-2,4-dione **724761-74-4P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-2-trifluoromethylphenoxy]benzyl]oxazolidine-2,4-dione **724761-75-5P**, 5-[4-[4-(2-Amino-2-carboxyethyl)-3-trifluoromethylphenoxy]benzylidene]thiazolidine-2,4-dione **724761-76-6P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-3-trifluoromethylphenoxy]benzylidene]thiazolidine-2,4-dione **724761-77-7P**, 5-[4-[4-(2-Amino-2-carboxyethyl)-3-trifluoromethylphenoxy]benzyl]thiazolidine-2,4-dione **724761-78-8P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-3-trifluoromethylphenoxy]benzyl]thiazolidine-2,4-dione **724761-79-9P**, 5-[4-[4-(2-Amino-2-carboxyethyl)-3-trifluoromethylphenoxy]benzylidene]oxazolidine-2,4-dione **724761-80-2P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-3-trifluoromethylphenoxy]benzylidene]oxazolidine-2,4-dione **724761-81-3P**, 5-[4-[4-(2-Amino-2-carboxyethyl)-3-

trifluoromethylphenoxy]benzyl]oxazolidine-2,4-dione **724761-82-4P**, 5-[4-[4-(2-Amino-2-methoxycarbonylethyl)-3-trifluoromethylphenoxy]benzyl]oxazolidine-2,4-dione **724761-83-5P**, 5-[4-[4-(2-tert-Butoxycarbonylamino-2-methoxycarbonylethyl)phenoxy]benzyl]thiazolidine-2,4-dione **724761-84-6P**, 5-[4-[4-(2-tert-Butoxycarbonylamino-2-methoxycarbonylethyl)phenoxy]benzylidene]oxazolidine-2,4-dione **724761-85-7P**, 5-[4-[4-(2-tert-Butoxycarbonylamino-2-methoxycarbonylethyl)phenoxy]benzyl]oxazolidine-2,4-dione **724761-86-8P**, 5-[4-[4-(2-tert-Butoxycarbonylamino-2-carboxyethyl)phenoxy]benzylidene]thiazolidine-2,4-dione **724761-87-9P**, 5-[4-[4-(2-tert-Butoxycarbonylamino-2-carboxyethyl)phenoxy]benzyl]thiazolidine-2,4-dione **724761-88-0P**, 5-[4-[4-(2-tert-Butoxycarbonylamino-2-carboxyethyl)phenoxy]benzylidene]oxazolidine-2,4-dione **724761-89-1P**, 5-[4-[4-(2-t-Butoxycarbonylamino-2-carboxyethyl)phenoxy]benzyl]oxazolidine-2,4-dione
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of tyrosine thiazolidinylmethylphenyl ether derivs. for treatment of immunol. diseases, inflammation, obesity, hyperlipidemia, hypertension, neurol. diseases, and diabetes)

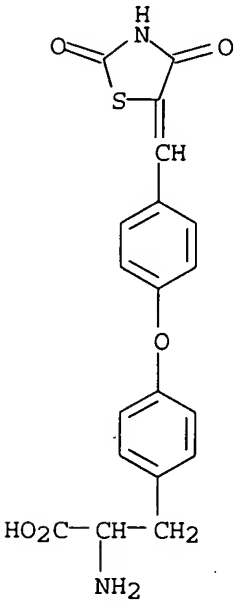
RN 724760-24-1 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]-, methyl ester, monohydrochloride (9CI) (CA INDEX NAME)



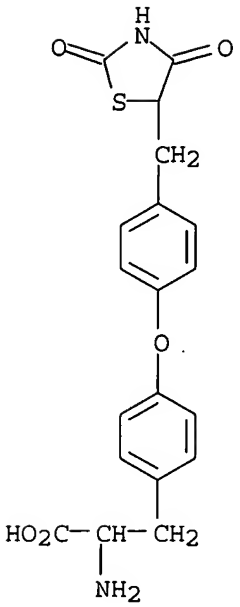
RN 724760-28-5 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



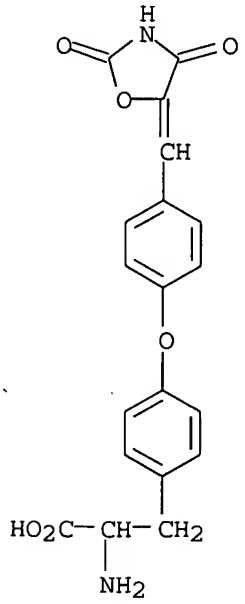
RN 724760-29-6 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]phenyl]- (9CI) (CA INDEX NAME)



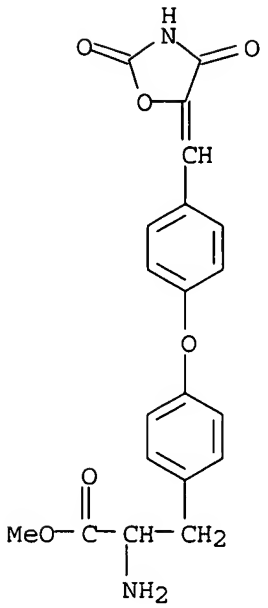
RN 724760-30-9 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]- (9CI) (CA INDEX NAME)



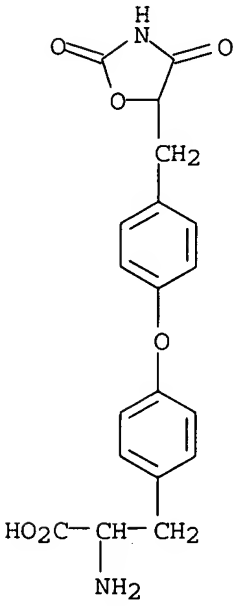
RN 724760-31-0 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinylidene)methyl]phenyl]- (9CI) (CA INDEX NAME)



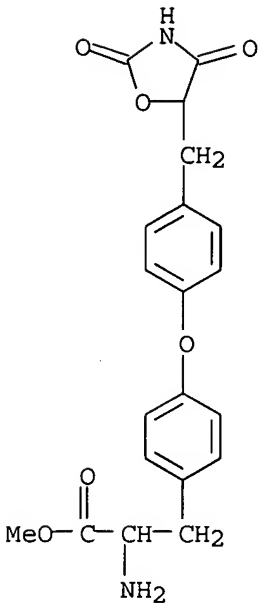
RN 724760-32-1 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinylidene)methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



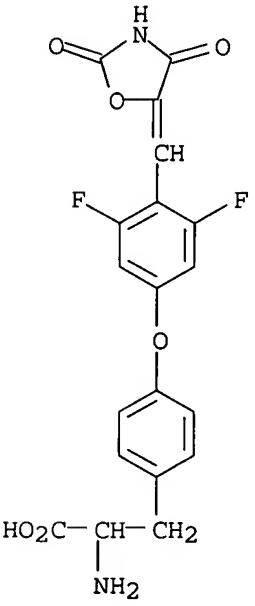
RN 724760-33-2 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinyl)methyl]phenyl]- (9CI) (CA INDEX NAME)



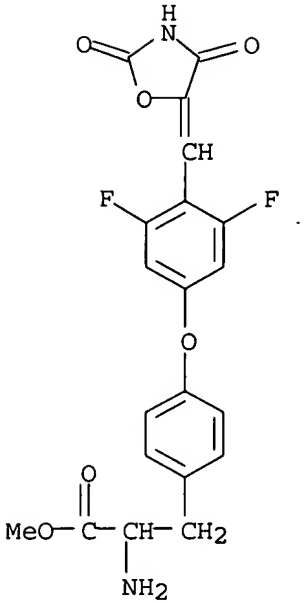
RN 724760-34-3 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinyl)methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



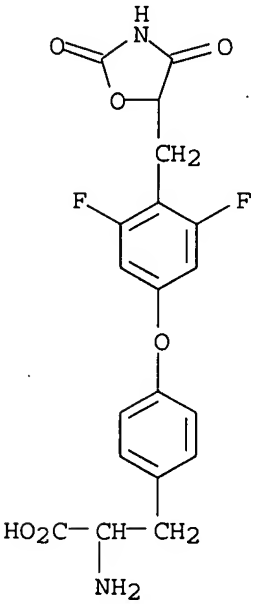
RN 724760-35-4 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinylidene)methyl]-3,5-difluorophenyl]- (9CI) (CA INDEX NAME)



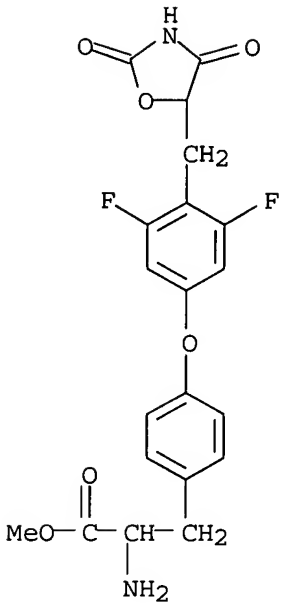
RN 724760-36-5 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinylidene)methyl]-3,5-difluorophenyl]- , methyl ester (9CI) (CA INDEX NAME)



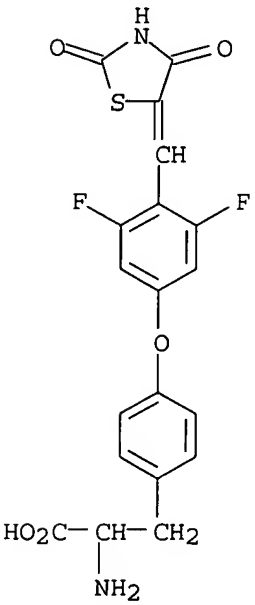
RN 724760-37-6 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinyl)methyl]-3,5-difluorophenyl]-
(9CI) (CA INDEX NAME)



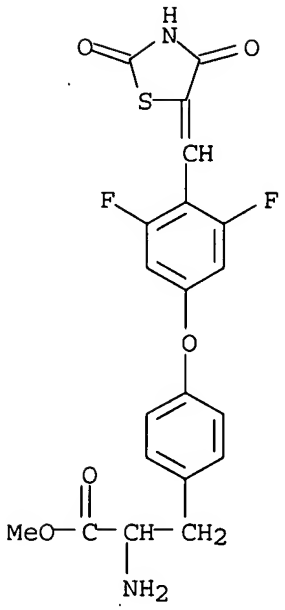
RN 724760-38-7 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinyl)methyl]-3,5-difluorophenyl]-,
methyl ester (9CI) (CA INDEX NAME)



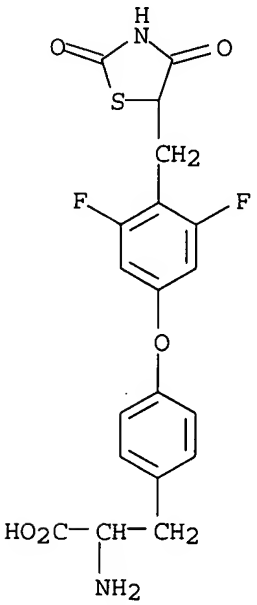
RN 724760-39-8 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]-3,5-difluorophenyl]- (9CI) (CA INDEX NAME)



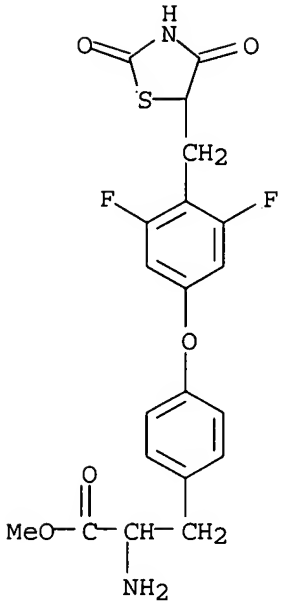
RN 724760-40-1 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]-3,5-difluorophenyl]-, methyl ester (9CI) (CA INDEX NAME)



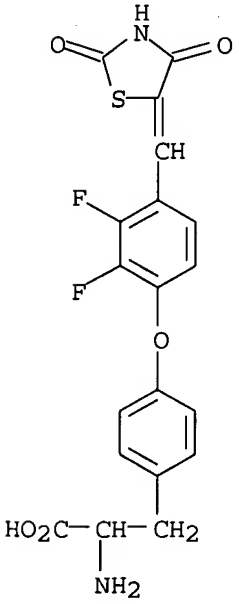
RN 724760-41-2 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]-3,5-difluorophenyl]- (9CI) (CA INDEX NAME)



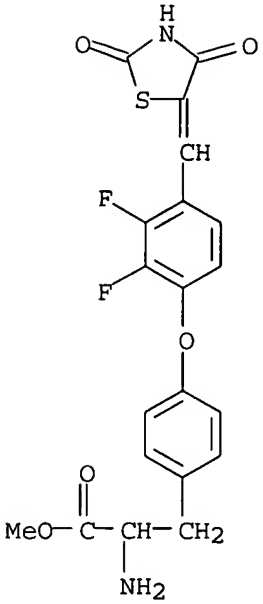
RN 724760-42-3 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]-3,5-difluorophenyl]-, methyl ester (9CI) (CA INDEX NAME)



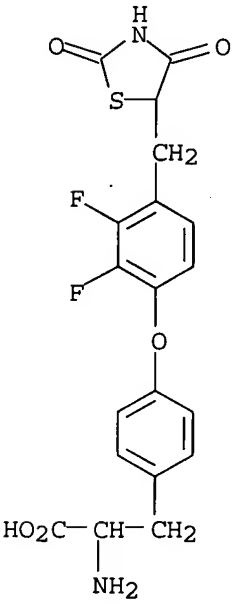
RN 724760-43-4 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]-2,3-difluorophenyl]- (9CI) (CA INDEX NAME)



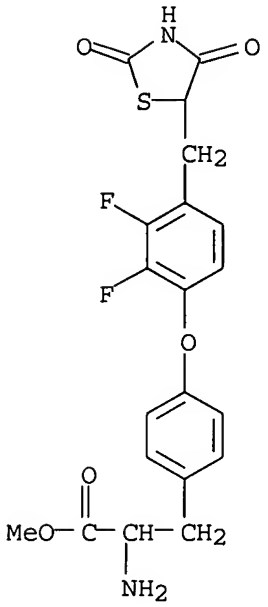
RN 724760-44-5 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]-2,3-difluorophenyl]-, methyl ester (9CI) (CA INDEX NAME)



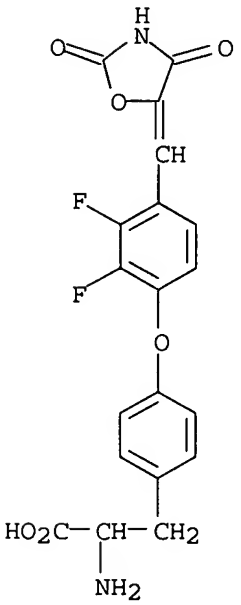
RN 724760-45-6 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]-2,3-difluorophenyl]- (9CI) (CA INDEX NAME)



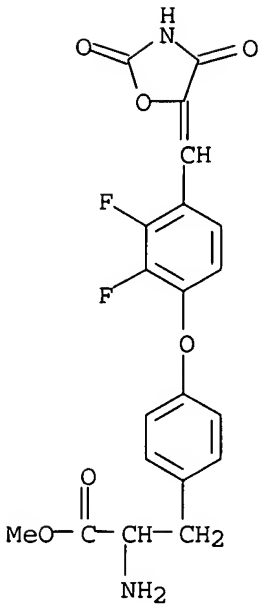
RN 724760-46-7 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]-2,3-difluorophenyl]-, methyl ester (9CI) (CA INDEX NAME)



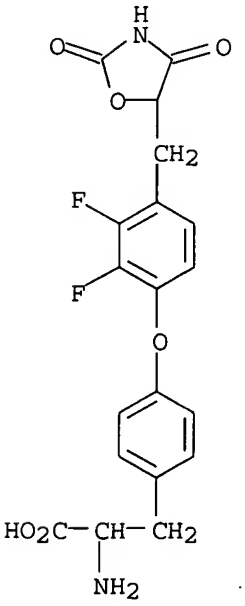
RN 724760-47-8 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinylidene)methyl]-2,3-difluorophenyl]- (9CI) (CA INDEX NAME)



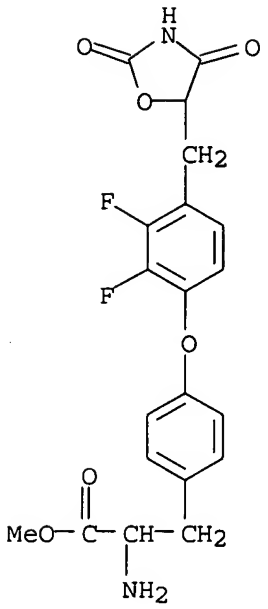
RN 724760-49-0 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinylidene)methyl]-2,3-difluorophenyl]- , methyl ester (9CI) (CA INDEX NAME)



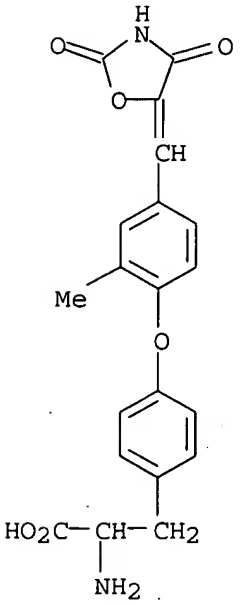
RN 724760-50-3 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinyl)methyl]-2,3-difluorophenyl]- (9CI) (CA INDEX NAME)



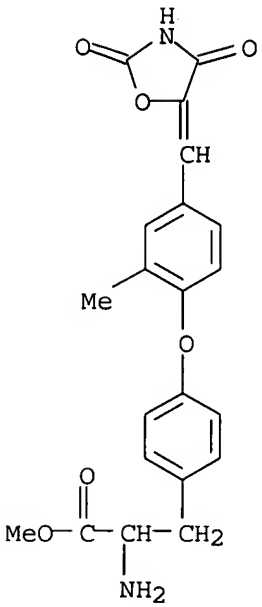
RN 724760-51-4 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinyl)methyl]-2,3-difluorophenyl]-, methyl ester (9CI) (CA INDEX NAME)



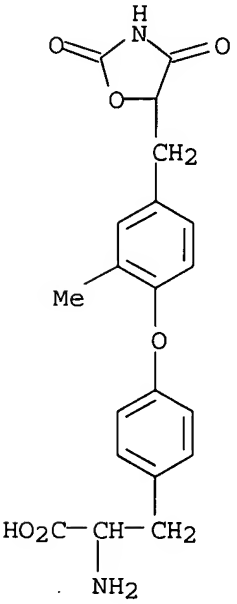
RN 724760-52-5 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinylidene)methyl]-2-methylphenyl]- (9CI) (CA INDEX NAME)



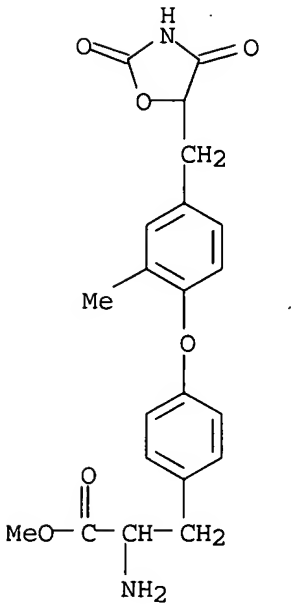
RN 724760-53-6 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinylidene)methyl]-2-methylphenyl]-, methyl ester (9CI) (CA INDEX NAME)



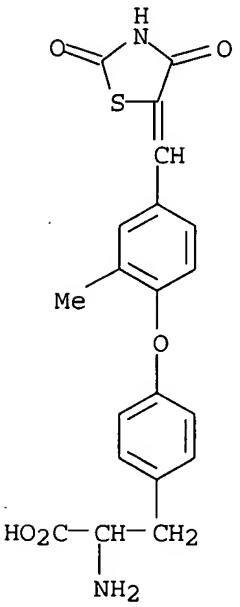
RN 724760-55-8 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinyl)methyl]-2-methylphenyl]- (9CI) (CA INDEX NAME)



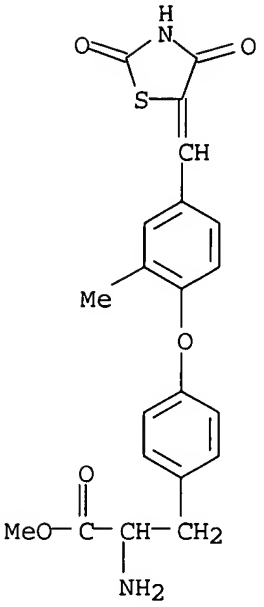
RN 724760-56-9 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinyl)methyl]-2-methylphenyl]-, methyl ester (9CI) (CA INDEX NAME)



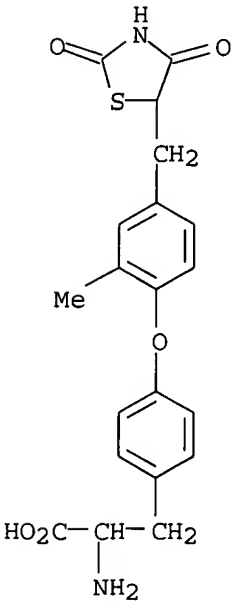
RN 724760-58-1 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]-2-methylphenyl]- (9CI) (CA INDEX NAME)



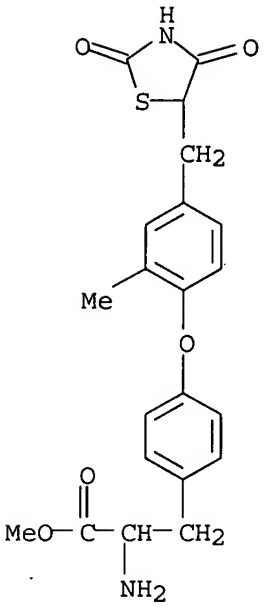
RN 724760-59-2 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]-2-methylphenyl]-, methyl ester (9CI) (CA INDEX NAME)



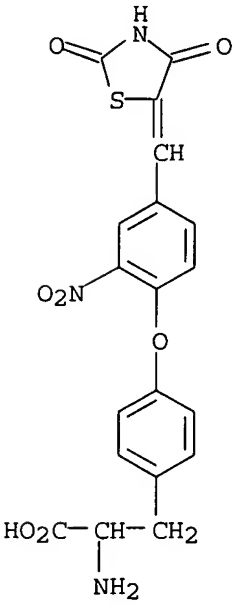
RN 724760-60-5 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]-2-methylphenyl]- (9CI) (CA INDEX NAME)



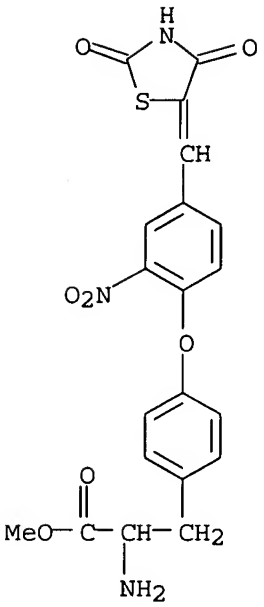
RN 724760-61-6 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]-2-methylphenyl]-, methyl ester (9CI) (CA INDEX NAME)



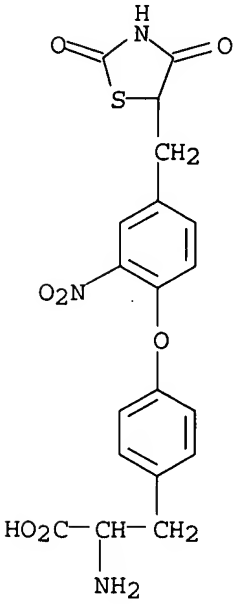
RN 724760-62-7 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]-2-nitrophenyl]- (9CI) (CA INDEX NAME)



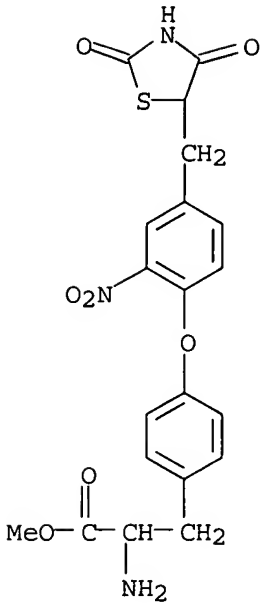
RN 724760-63-8 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]-2-nitrophenyl]-, methyl ester (9CI) (CA INDEX NAME)



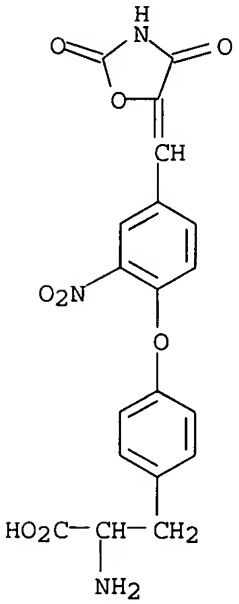
RN 724760-64-9 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]-2-nitrophenyl]- (9CI) (CA INDEX NAME)



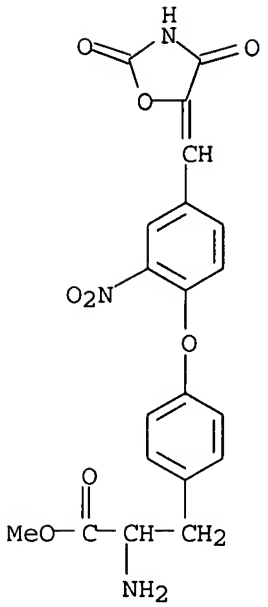
RN 724760-65-0 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]-2-nitrophenyl]-, methyl ester (9CI) (CA INDEX NAME)



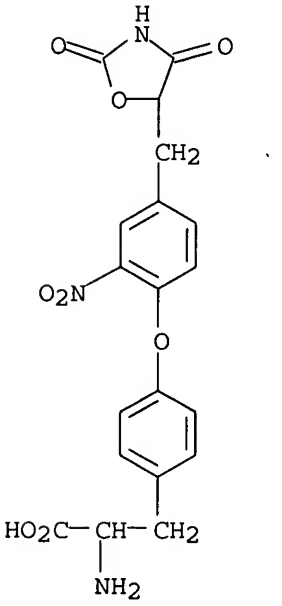
RN 724760-66-1 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinylidene)methyl]-2-nitrophenyl]-
(9CI) (CA INDEX NAME)



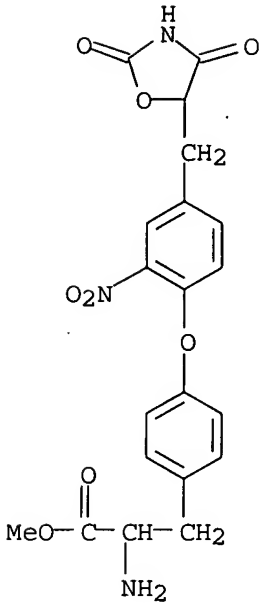
RN 724760-67-2 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinylidene)methyl]-2-nitrophenyl]-,
methyl ester (9CI) (CA INDEX NAME)



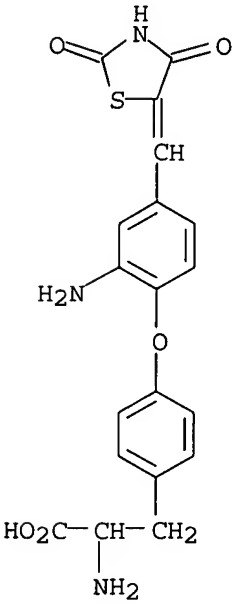
RN 724760-68-3 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinyl)methyl]-2-nitrophenyl]- (9CI) (CA INDEX NAME)



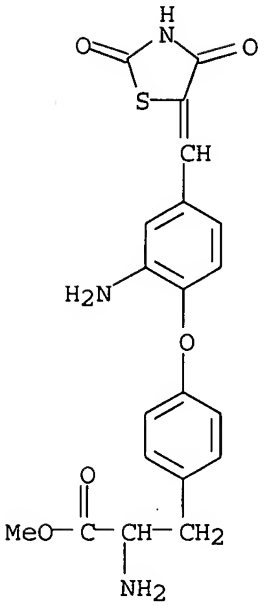
RN 724760-69-4 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinyl)methyl]-2-nitrophenyl]-, methyl ester (9CI) (CA INDEX NAME)



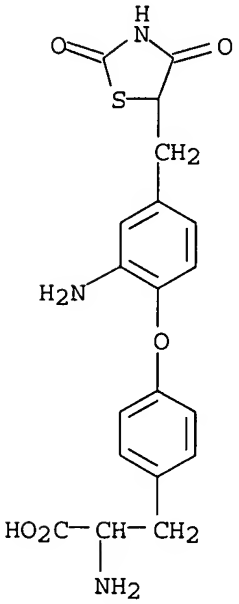
RN 724760-70-7 HCAPLUS
CN Tyrosine, O-[2-amino-4-[(2,4-dioxo-5-thiazolidinylidene)methyl]phenyl]-
(9CI) (CA INDEX NAME)



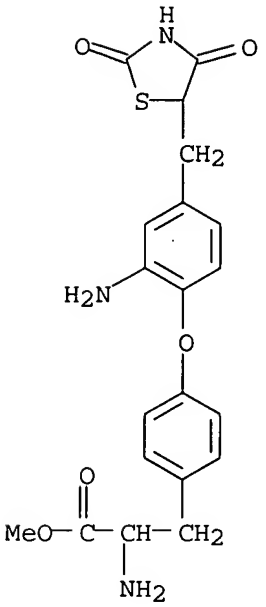
RN 724760-71-8 HCAPLUS
CN Tyrosine, O-[2-amino-4-[(2,4-dioxo-5-thiazolidinylidene)methyl]phenyl]-,
methyl ester (9CI) (CA INDEX NAME)



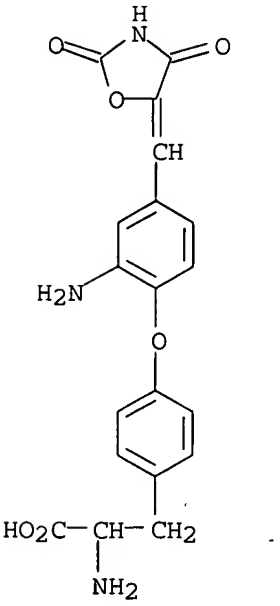
RN 724760-72-9 HCAPLUS
CN Tyrosine, O-[2-amino-4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]- (9CI) (CA INDEX NAME)



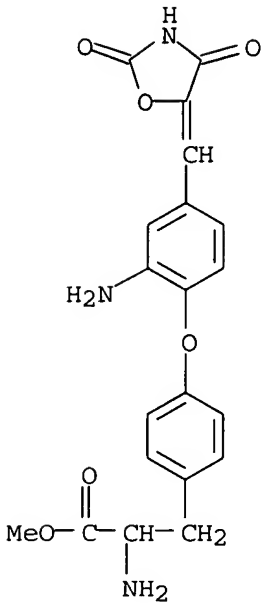
RN 724760-73-0 HCAPLUS
CN Tyrosine, O-[2-amino-4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



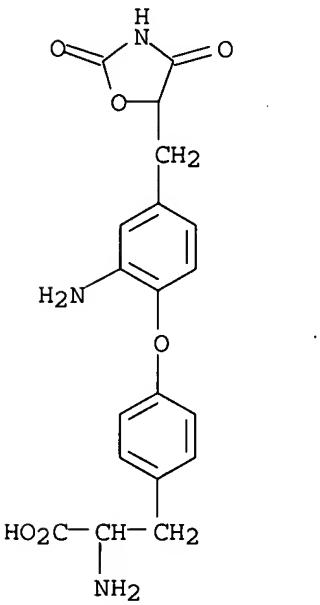
RN 724760-74-1 HCAPLUS
CN Tyrosine, O-[2-amino-4-[(2,4-dioxo-5-oxazolidinylidene)methyl]phenyl]-
(9CI) (CA INDEX NAME)



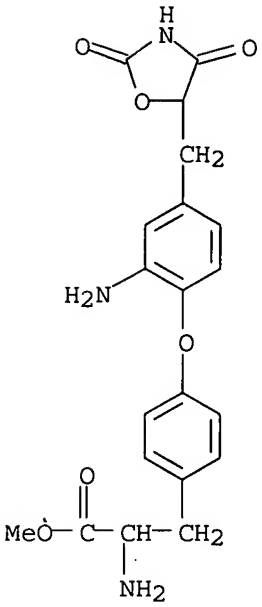
RN 724760-75-2 HCAPLUS
CN Tyrosine, O-[2-amino-4-[(2,4-dioxo-5-oxazolidinylidene)methyl]phenyl]-,
methyl ester (9CI) (CA INDEX NAME)



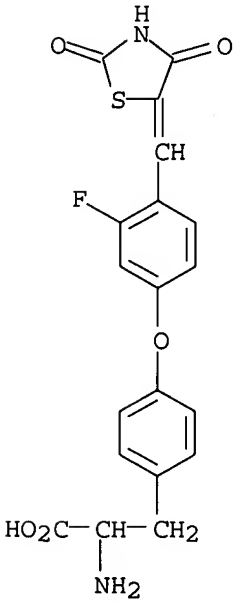
RN 724760-76-3 HCAPLUS
CN Tyrosine, O-[2-amino-4-[(2,4-dioxo-5-oxazolidinyl)methyl]phenyl]- (9CI) (CA INDEX NAME)



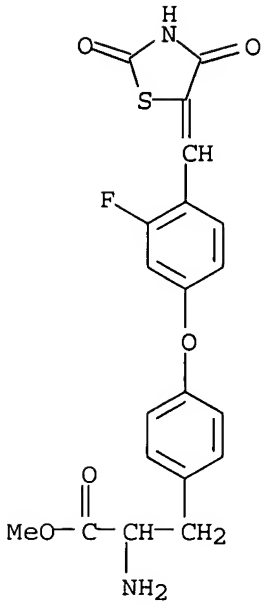
RN 724760-77-4 HCAPLUS
CN Tyrosine, O-[2-amino-4-[(2,4-dioxo-5-oxazolidinyl)methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



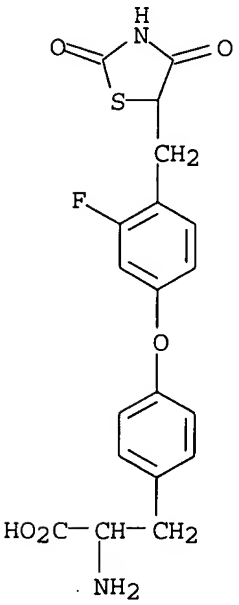
RN 724760-78-5 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]-3-fluorophenyl]- (9CI) (CA INDEX NAME)



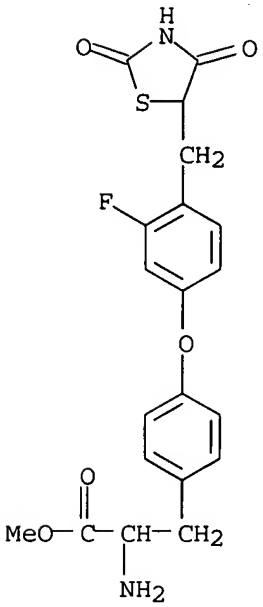
RN 724760-79-6 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]-3-fluorophenyl]-, methyl ester (9CI) (CA INDEX NAME)



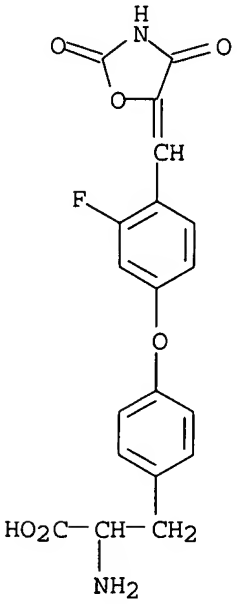
RN 724760-80-9 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]-3-fluorophenyl]- (9CI) (CA INDEX NAME)



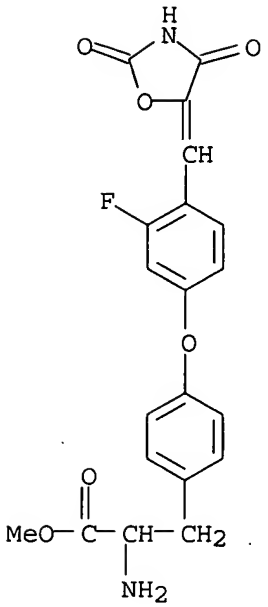
RN 724760-81-0 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]-3-fluorophenyl]-, methyl ester (9CI) (CA INDEX NAME)



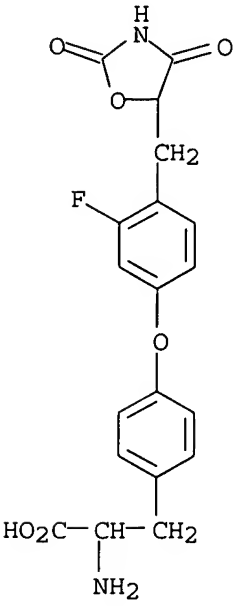
RN 724760-82-1 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinylidene)methyl]-3-fluorophenyl]- (9CI) (CA INDEX NAME)



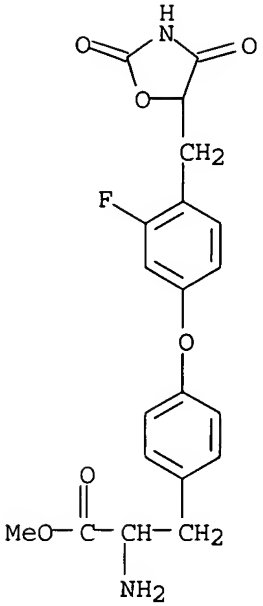
RN 724760-83-2 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinylidene)methyl]-3-fluorophenyl]-, methyl ester (9CI) (CA INDEX NAME)



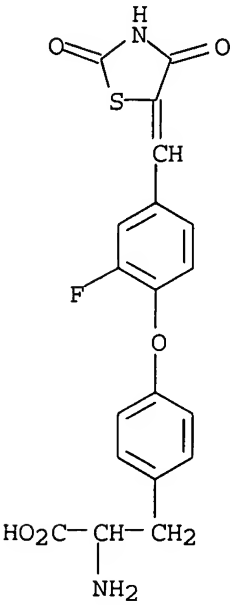
RN 724760-84-3 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinyl)methyl]-3-fluorophenyl]- (9CI) (CA INDEX NAME)



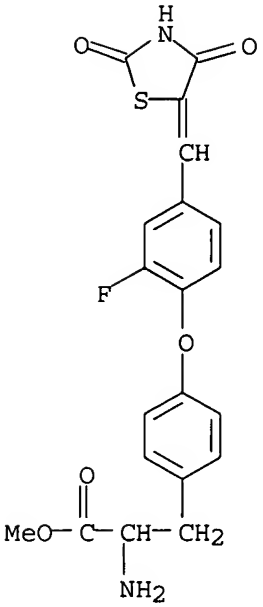
RN 724760-85-4 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinyl)methyl]-3-fluorophenyl]-, methyl ester (9CI) (CA INDEX NAME)



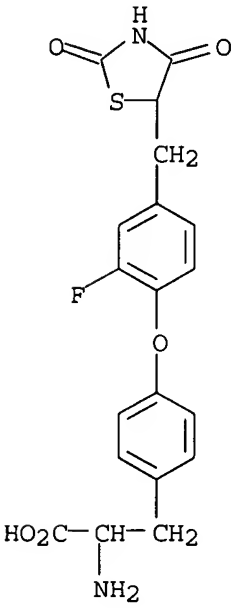
RN 724760-86-5 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]-2-fluorophenyl]- (9CI) (CA INDEX NAME)



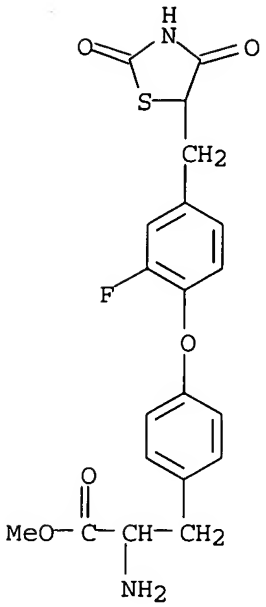
RN 724760-87-6 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]-2-fluorophenyl]-, methyl ester (9CI) (CA INDEX NAME)



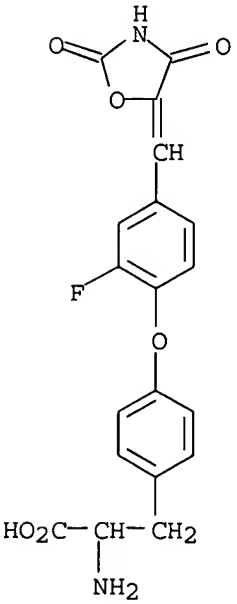
RN 724760-88-7 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]-2-fluorophenyl]- (9CI) (CA INDEX NAME)



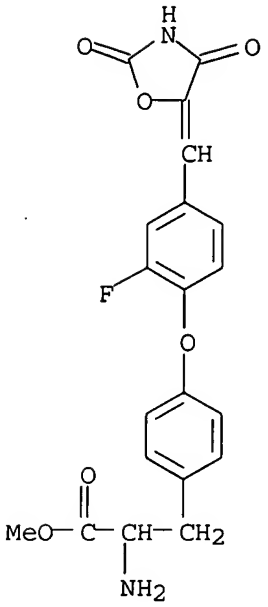
RN 724760-89-8 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]-2-fluorophenyl]-, methyl ester (9CI) (CA INDEX NAME)



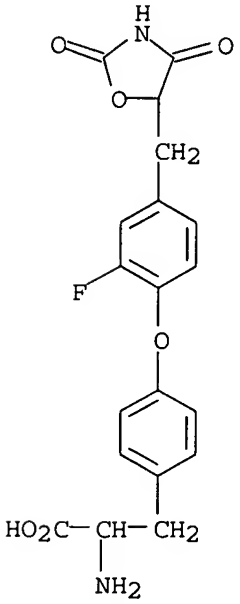
RN 724760-90-1 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinylidene)methyl]-2-fluorophenyl]- (9CI) (CA INDEX NAME)



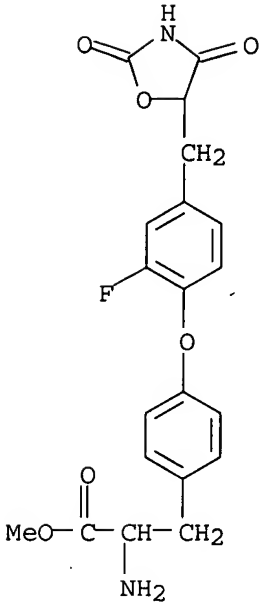
RN 724760-91-2 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinylidene)methyl]-2-fluorophenyl]-, methyl ester (9CI) (CA INDEX NAME)



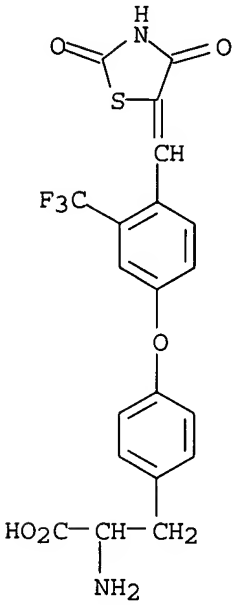
RN 724760-92-3 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinyl)methyl]-2-fluorophenyl]- (9CI) (CA INDEX NAME)



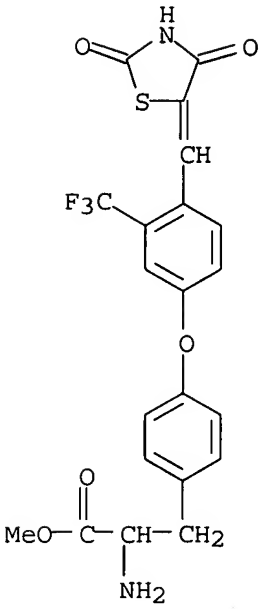
RN 724760-93-4 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinyl)methyl]-2-fluorophenyl]-, methyl ester (9CI) (CA INDEX NAME)



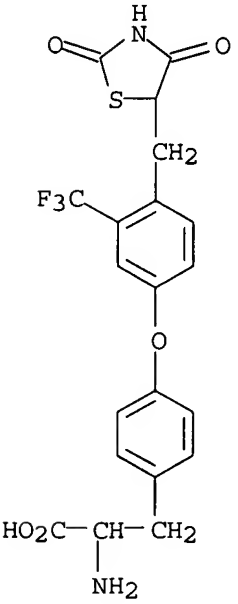
RN 724760-94-5 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]-3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



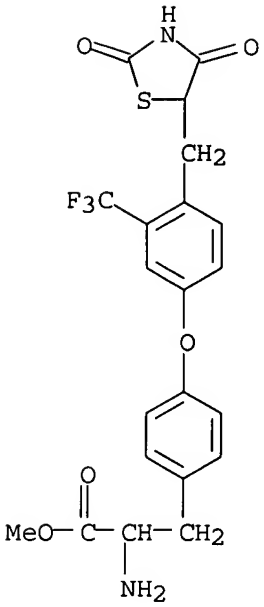
RN 724760-95-6 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]-3-(trifluoromethyl)phenyl]-, methyl ester (9CI) (CA INDEX NAME)



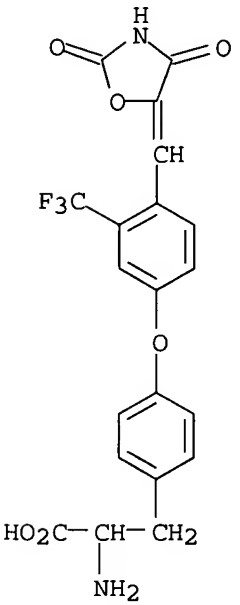
RN 724760-96-7 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]-3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



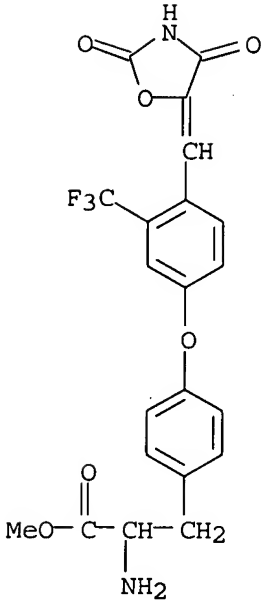
RN 724760-97-8 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]-3-(trifluoromethyl)phenyl]-, methyl ester (9CI) (CA INDEX NAME)



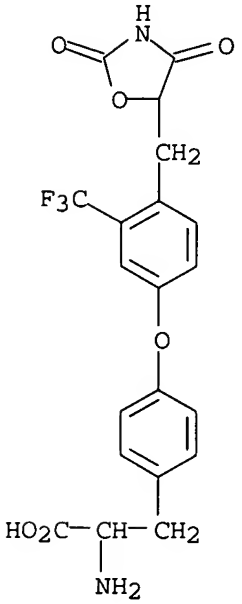
RN 724760-98-9 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinylidene)methyl]-3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



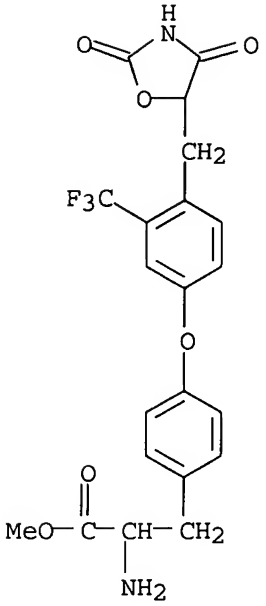
RN 724760-99-0 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinylidene)methyl]-3-(trifluoromethyl)phenyl]-, methyl ester (9CI) (CA INDEX NAME)



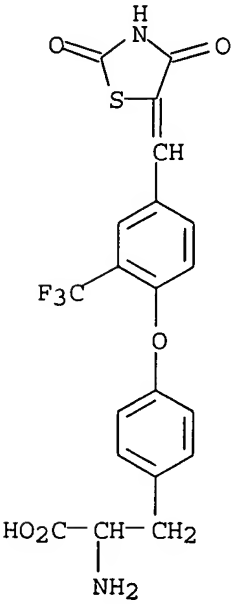
RN 724761-00-6 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinyl)methyl]-3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



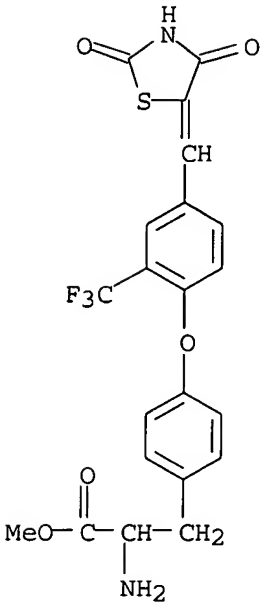
RN 724761-01-7 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinyl)methyl]-3-(trifluoromethyl)phenyl]-, methyl ester (9CI) (CA INDEX NAME)



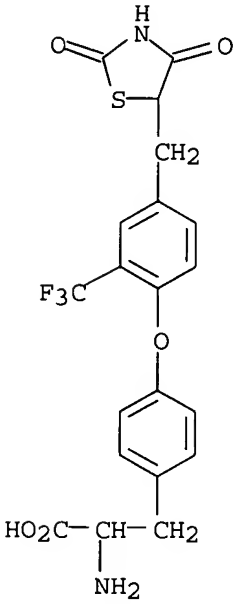
RN 724761-02-8 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]-2-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



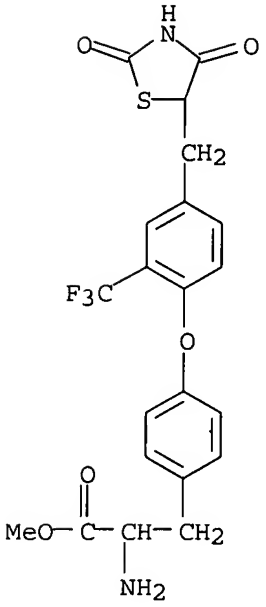
RN 724761-03-9 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]-2-(trifluoromethyl)phenyl]-, methyl ester (9CI) (CA INDEX NAME)



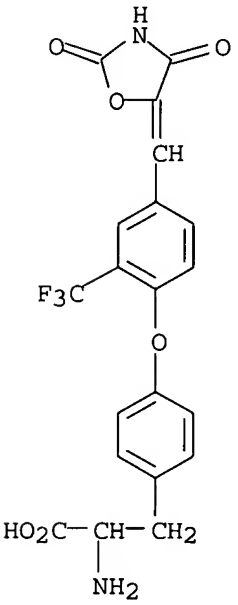
RN 724761-04-0 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]-2-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



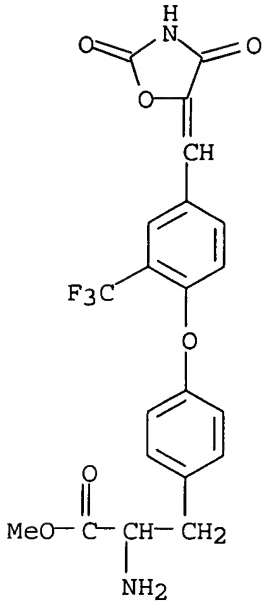
RN 724761-05-1 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]-2-(trifluoromethyl)phenyl]-, methyl ester (9CI) (CA INDEX NAME)



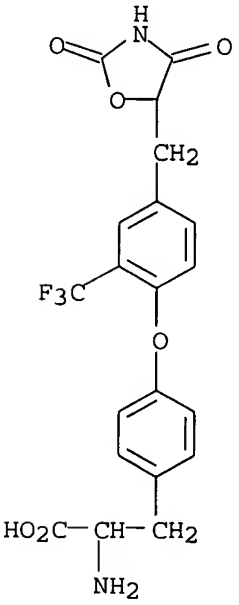
RN 724761-06-2 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinylidene)methyl]-2-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



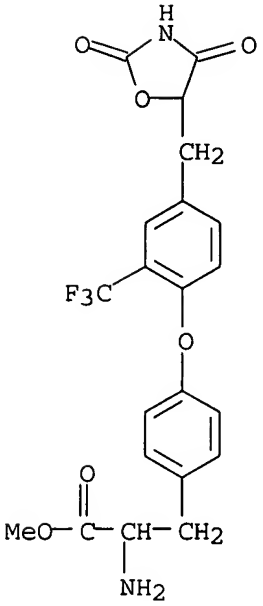
RN 724761-07-3 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinylidene)methyl]-2-(trifluoromethyl)phenyl]-, methyl ester (9CI) (CA INDEX NAME)



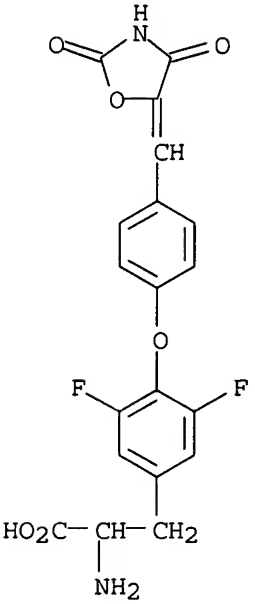
RN 724761-08-4 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinyl)methyl]-2-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



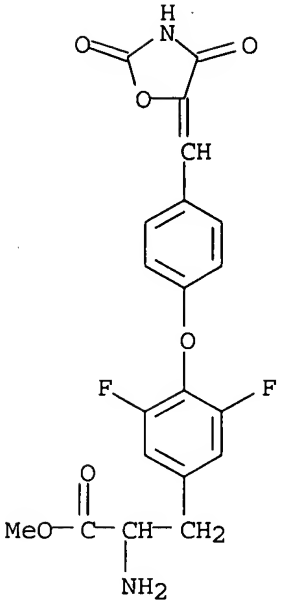
RN 724761-09-5 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinyl)methyl]-2-(trifluoromethyl)phenyl]-, methyl ester (9CI) (CA INDEX NAME)



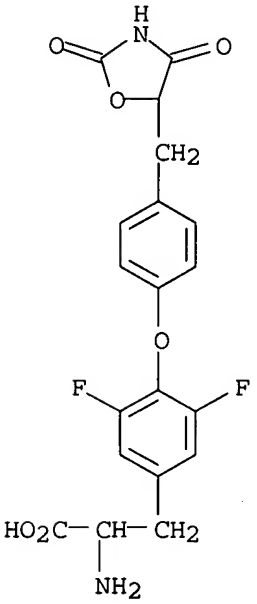
RN 724761-10-8 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinylidene)methyl]phenyl]-3,5-difluoro- (9CI) (CA INDEX NAME)



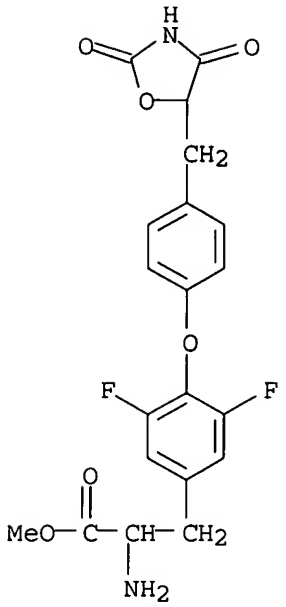
RN 724761-11-9 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinylidene)methyl]phenyl]-3,5-difluoro-, methyl ester (9CI) (CA INDEX NAME)



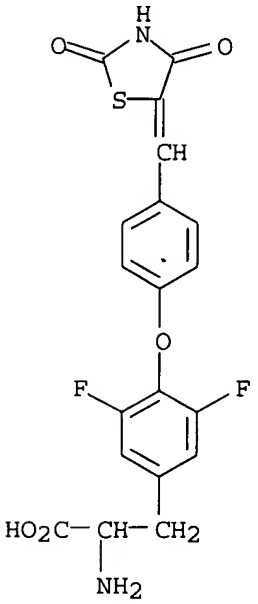
RN 724761-12-0 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinyl)methyl]phenyl]-3,5-difluoro- (9CI) (CA INDEX NAME)



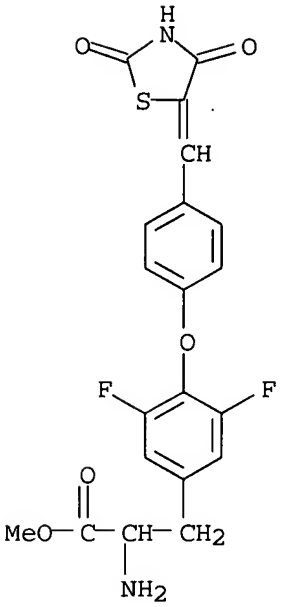
RN 724761-13-1 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinyl)methyl]phenyl]-3,5-difluoro-, methyl ester (9CI) (CA INDEX NAME)



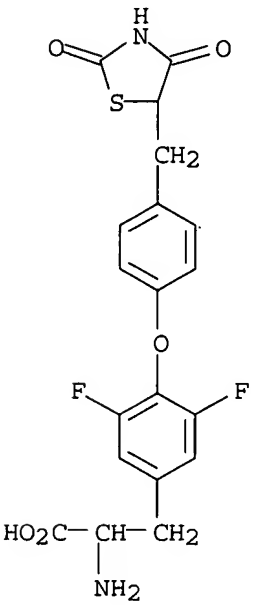
RN 724761-14-2 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]phenyl]-3,5-difluoro- (9CI) (CA INDEX NAME)



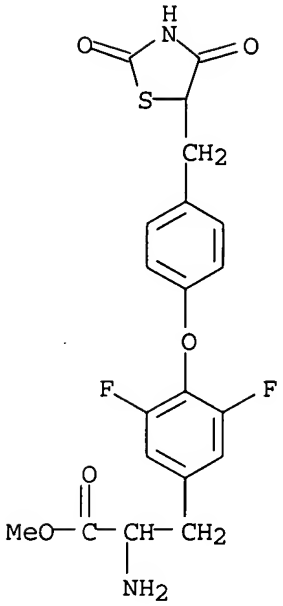
RN 724761-15-3 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]phenyl]-3,5-difluoro-, methyl ester (9CI) (CA INDEX NAME)



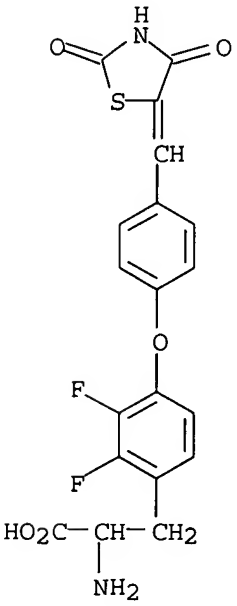
RN 724761-16-4 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]-3,5-difluoro- (9CI) (CA INDEX NAME)



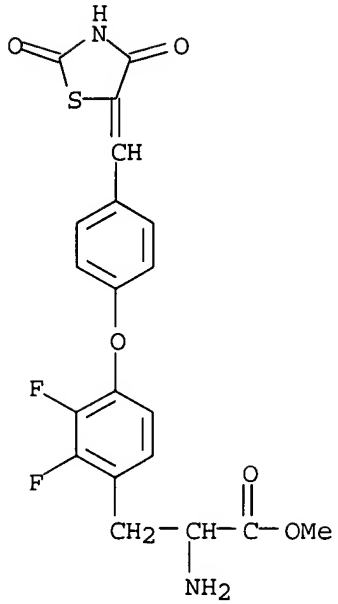
RN 724761-17-5 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]-3,5-difluoro-, methyl ester (9CI) (CA INDEX NAME)



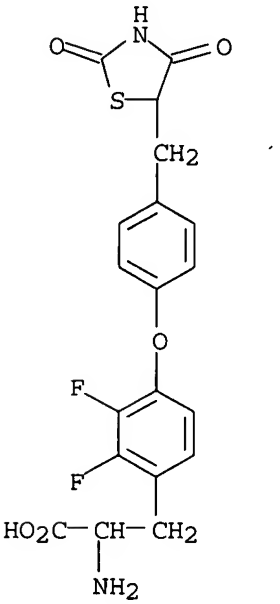
RN 724761-18-6 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]phenyl]-2,3-difluoro- (9CI) (CA INDEX NAME)



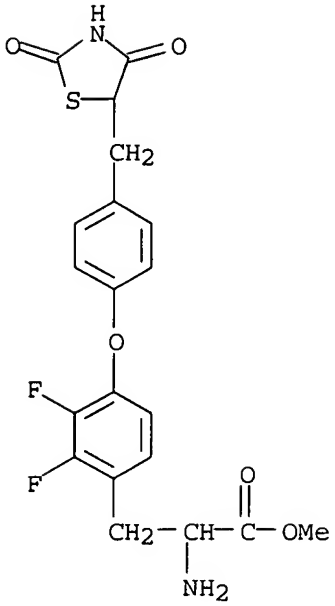
RN 724761-19-7 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]phenyl]-2,3-difluoro-, methyl ester (9CI) (CA INDEX NAME)



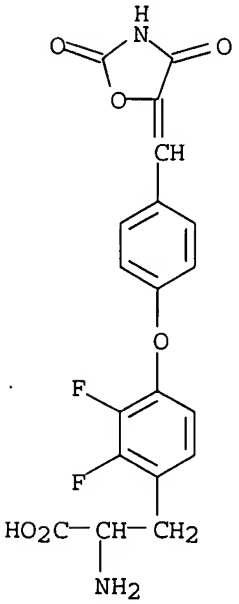
RN 724761-20-0 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]-2,3-difluoro- (9CI) (CA INDEX NAME)



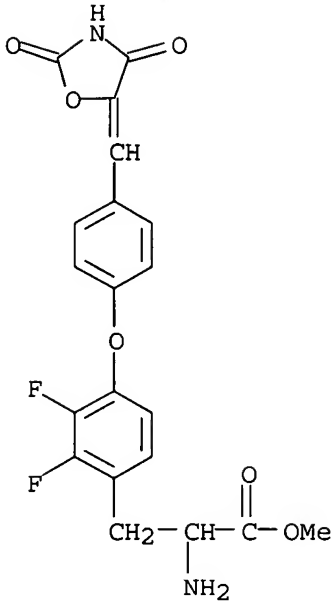
RN 724761-21-1 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]-2,3-difluoro-, methyl ester (9CI) (CA INDEX NAME)



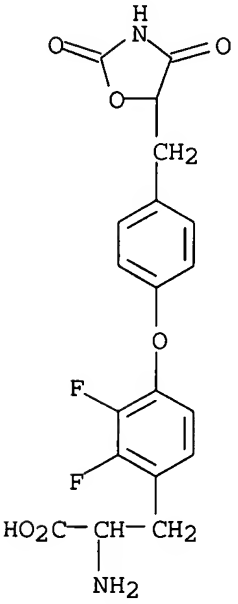
RN 724761-22-2 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinylidene)methyl]phenyl]-2,3-difluoro- (9CI) (CA INDEX NAME)



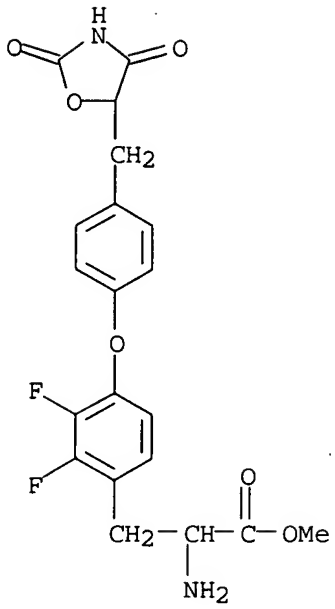
RN 724761-23-3 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinylidene)methyl]phenyl]-2,3-difluoro-, methyl ester (9CI) (CA INDEX NAME)



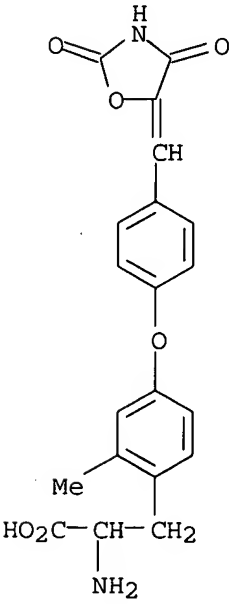
RN 724761-24-4 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinyl)methyl]phenyl]-2,3-difluoro-
(9CI) (CA INDEX NAME)



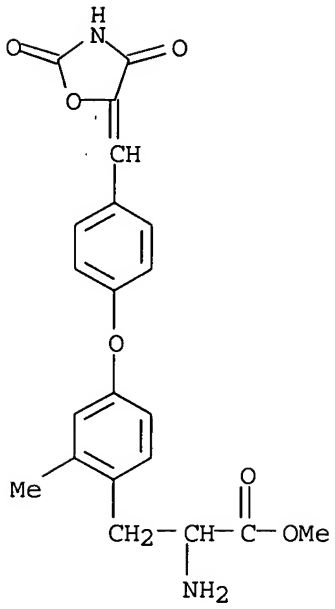
RN 724761-25-5 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinyl)methyl]phenyl]-2,3-difluoro-,
methyl ester (9CI) (CA INDEX NAME)



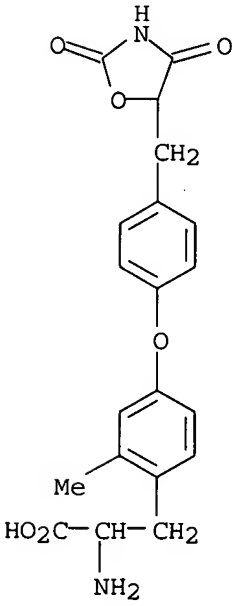
RN 724761-26-6 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinylidene)methyl]phenyl]-2-methyl- (9CI) (CA INDEX NAME)



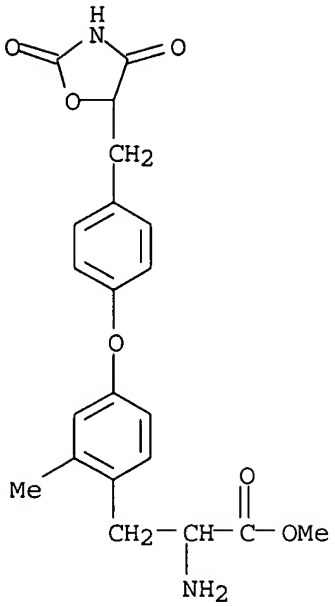
RN 724761-27-7 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinylidene)methyl]phenyl]-2-methyl-, methyl ester (9CI) (CA INDEX NAME)



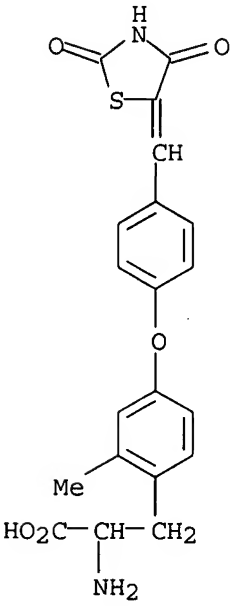
RN 724761-28-8 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinyl)methyl]phenyl]-2-methyl- (9CI) (CA INDEX NAME)



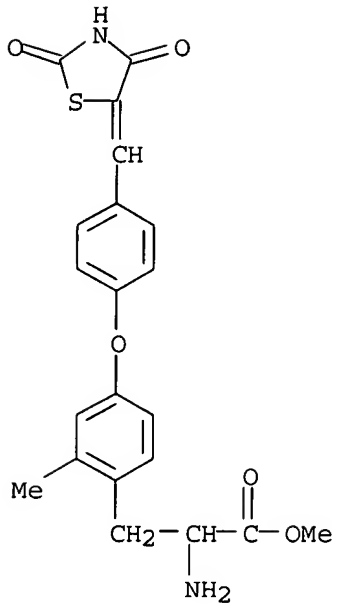
RN 724761-29-9 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinyl)methyl]phenyl]-2-methyl-, methyl ester (9CI) (CA INDEX NAME)



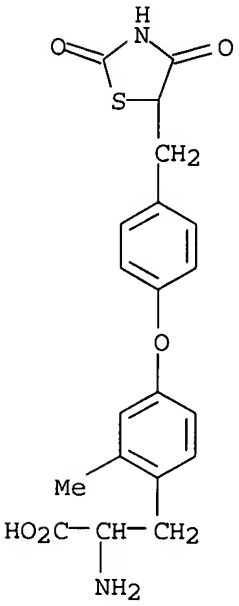
RN 724761-30-2 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]phenyl]-2-methyl-
(9CI) (CA INDEX NAME)



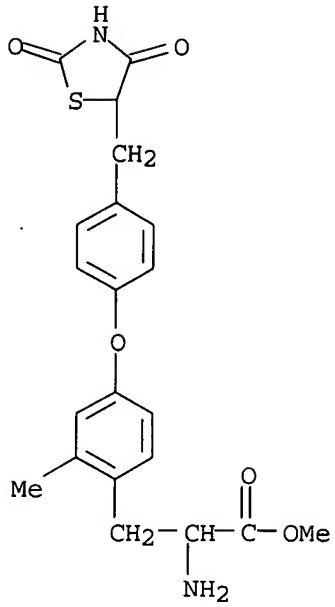
RN 724761-31-3 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]phenyl]-2-methyl-,
methyl ester (9CI) (CA INDEX NAME)



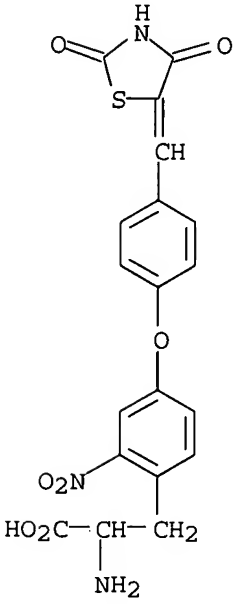
RN 724761-32-4 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]-2-methyl- (9CI) (CA INDEX NAME)



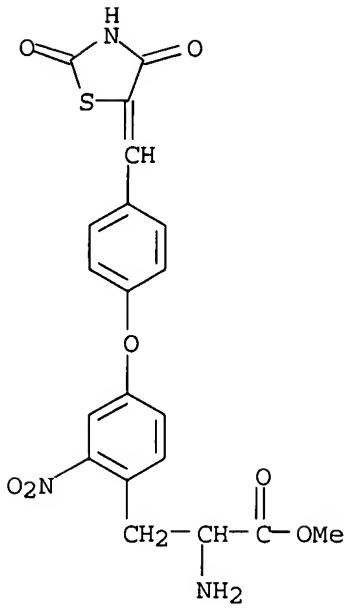
RN 724761-33-5 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]-2-methyl-, methyl ester (9CI) (CA INDEX NAME)



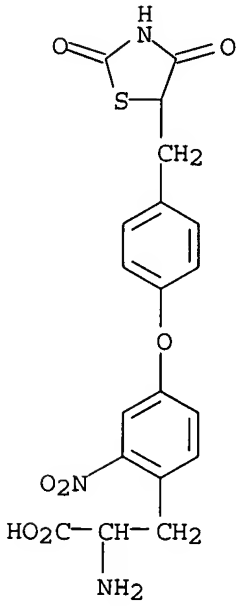
RN 724761-34-6 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]phenyl]-2-nitro-
(9CI) (CA INDEX NAME)



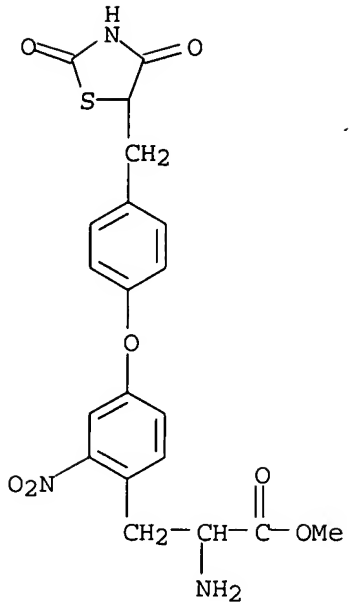
RN 724761-35-7 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]phenyl]-2-nitro-,
methyl ester (9CI) (CA INDEX NAME)



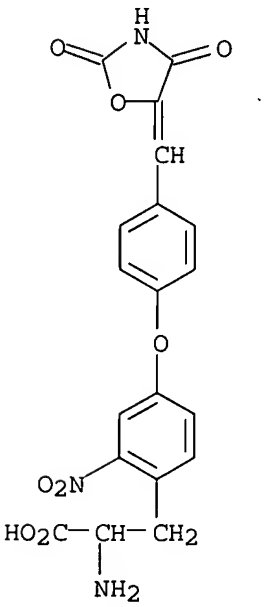
RN 724761-36-8 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]-2-nitro- (9CI) (CA INDEX NAME)



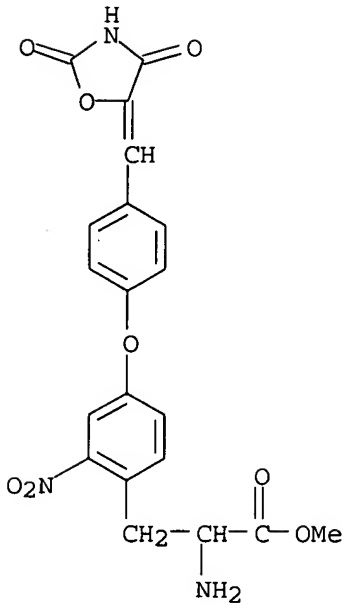
RN 724761-37-9 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]-2-nitro-, methyl ester (9CI) (CA INDEX NAME)



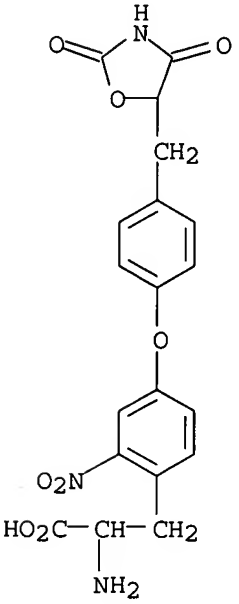
RN 724761-38-0 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinylidene)methyl]phenyl]-2-nitro- (9CI) (CA INDEX NAME)



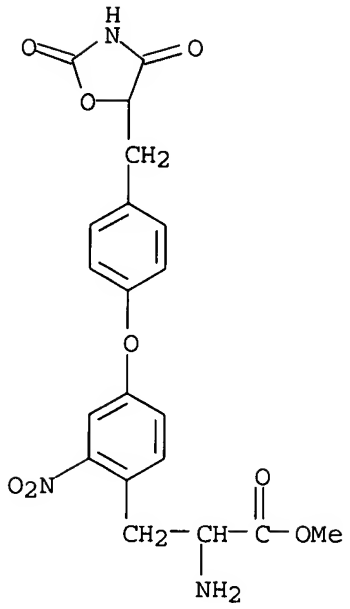
RN 724761-39-1 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinylidene)methyl]phenyl]-2-nitro-, methyl ester (9CI) (CA INDEX NAME)



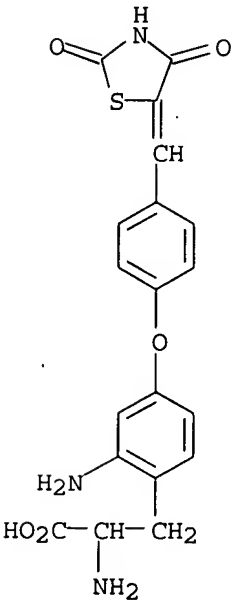
RN 724761-40-4 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinyl)methyl]phenyl]-2-nitro- (9CI) (CA INDEX NAME)



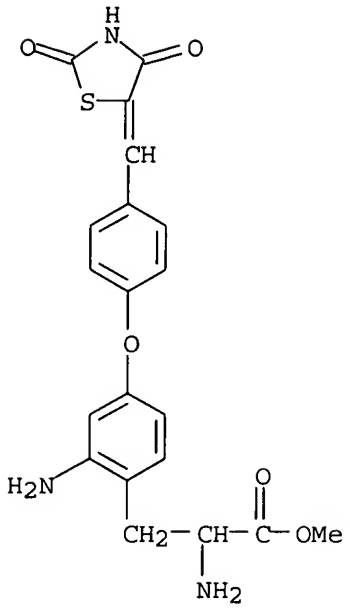
RN 724761-41-5 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinyl)methyl]phenyl]-2-nitro-, methyl ester (9CI) (CA INDEX NAME)



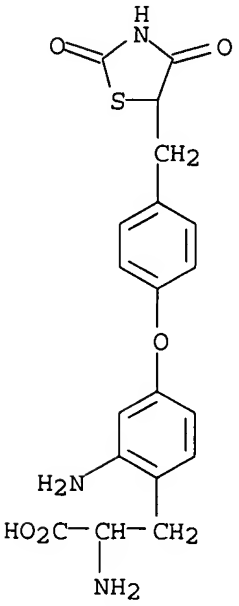
RN 724761-42-6 HCAPLUS
CN Tyrosine, 2-amino-O-[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]phenyl]- (9CI) (CA INDEX NAME)



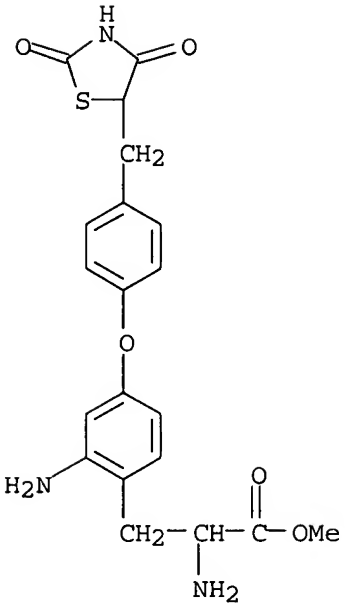
RN 724761-43-7 HCAPLUS
CN Tyrosine, 2-amino-O-[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



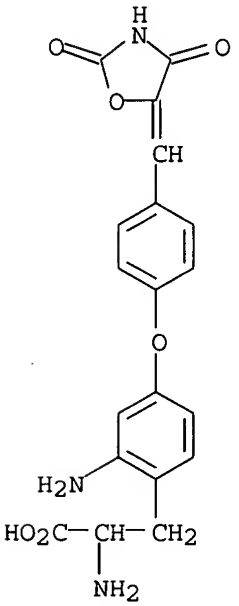
RN 724761-44-8 HCAPLUS
CN Tyrosine, 2-amino-O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]- (9CI) (CA INDEX NAME)



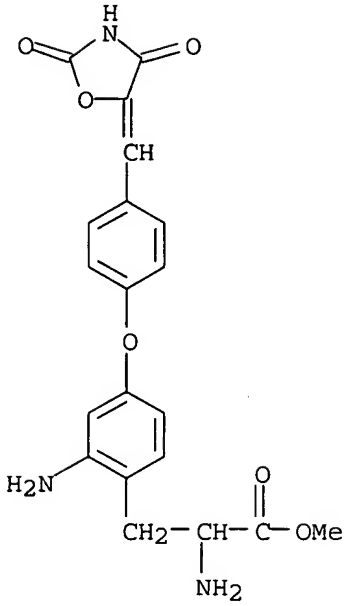
RN 724761-45-9 HCAPLUS
CN Tyrosine, 2-amino-O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



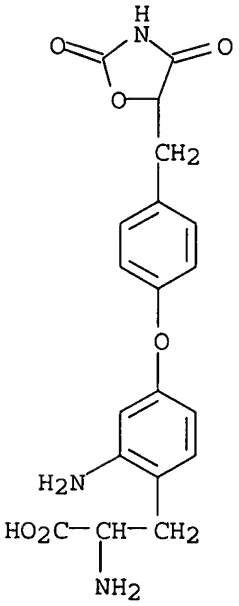
RN 724761-46-0 HCAPLUS
CN Tyrosine, 2-amino-O-[4-[(2,4-dioxo-5-oxazolidinylidene)methyl]phenyl]-
(9CI) (CA INDEX NAME)



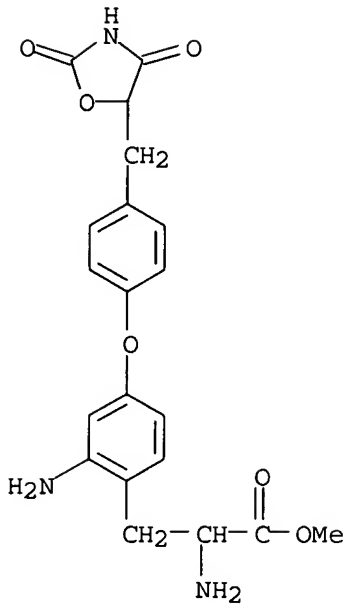
RN 724761-47-1 HCAPLUS
CN Tyrosine, 2-amino-O-[4-[(2,4-dioxo-5-oxazolidinylidene)methyl]phenyl]-,
methyl ester (9CI) (CA INDEX NAME)



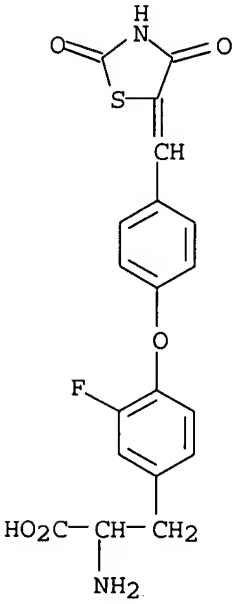
RN 724761-48-2 HCAPLUS
CN Tyrosine, 2-amino-O-[4-[(2,4-dioxo-5-oxazolidinyl)methyl]phenyl]- (9CI) (CA INDEX NAME)



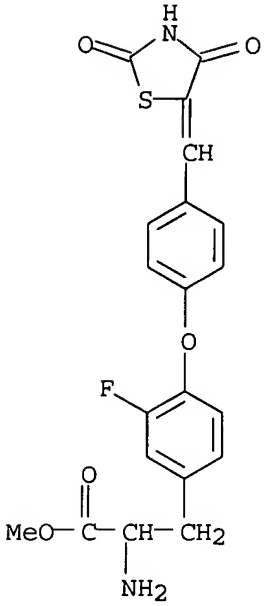
RN 724761-49-3 HCAPLUS
CN Tyrosine, 2-amino-O-[4-[(2,4-dioxo-5-oxazolidinyl)methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



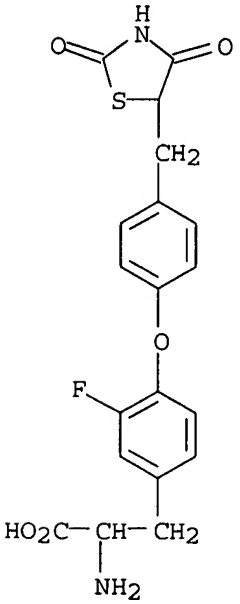
RN 724761-50-6 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]phenyl]-3-fluoro- (9CI) (CA INDEX NAME)



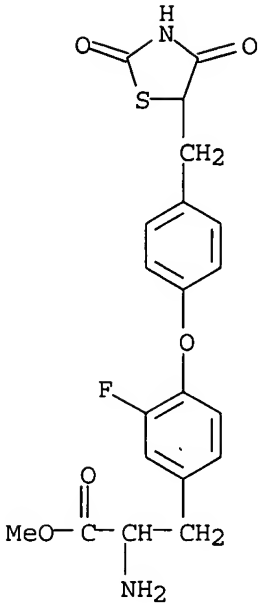
RN 724761-51-7 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]phenyl]-3-fluoro-, methyl ester (9CI) (CA INDEX NAME)



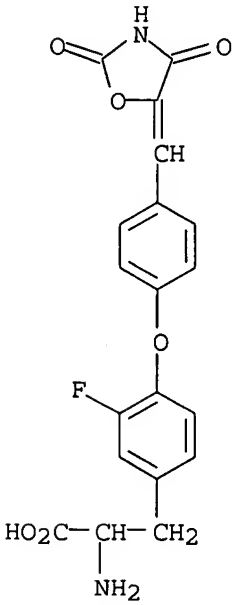
RN 724761-52-8 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]-3-fluoro- (9CI) (CA INDEX NAME)



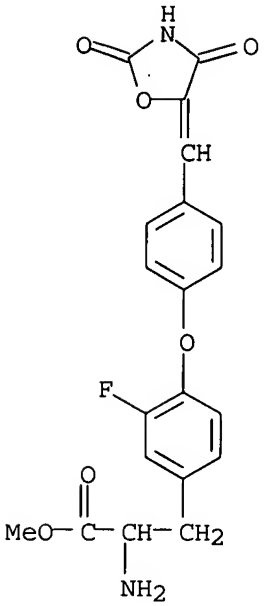
RN 724761-53-9 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]-3-fluoro-, methyl ester (9CI) (CA INDEX NAME)



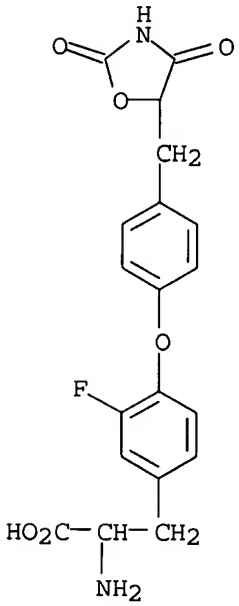
RN 724761-54-0 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinylidene)methyl]phenyl]-3-fluoro- (9CI) (CA INDEX NAME)



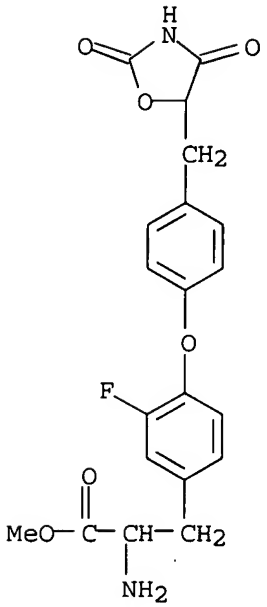
RN 724761-55-1 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinylidene)methyl]phenyl]-3-fluoro-, methyl ester (9CI) (CA INDEX NAME)



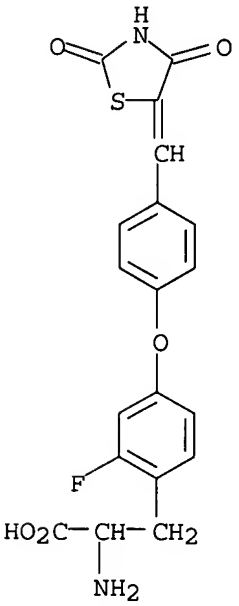
RN 724761-56-2 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinyl)methyl]phenyl]-3-fluoro- (9CI) (CA INDEX NAME)



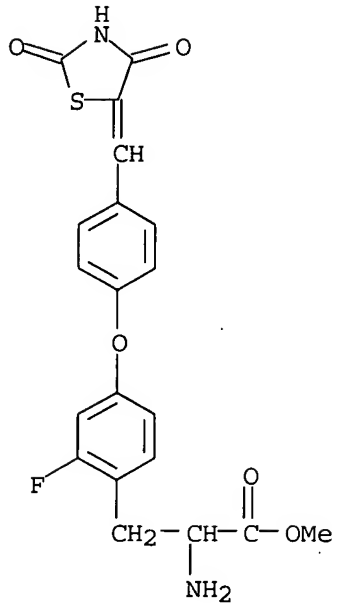
RN 724761-57-3 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinyl)methyl]phenyl]-3-fluoro-, methyl ester (9CI) (CA INDEX NAME)



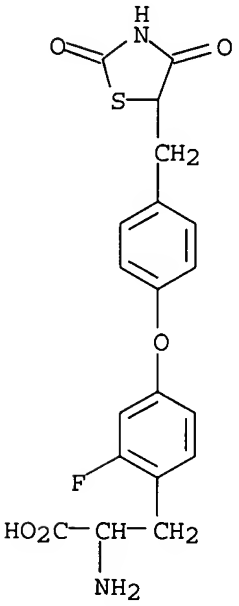
RN 724761-58-4 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]phenyl]-2-fluoro- (9CI) (CA INDEX NAME)



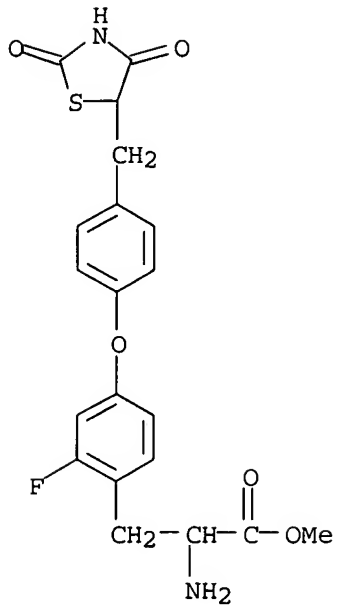
RN 724761-59-5 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]phenyl]-2-fluoro-, methyl ester (9CI) (CA INDEX NAME)



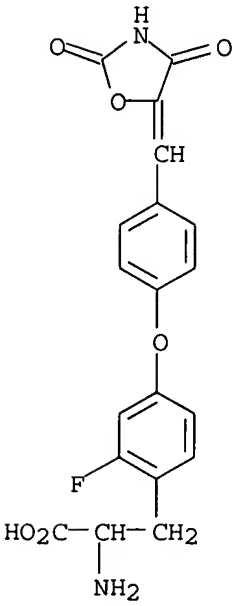
RN 724761-60-8 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]-2-fluoro- (9CI) (CA INDEX NAME)



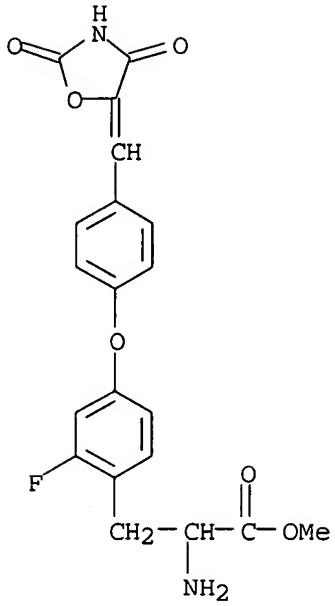
RN 724761-61-9 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]-2-fluoro-, methyl ester (9CI) (CA INDEX NAME)



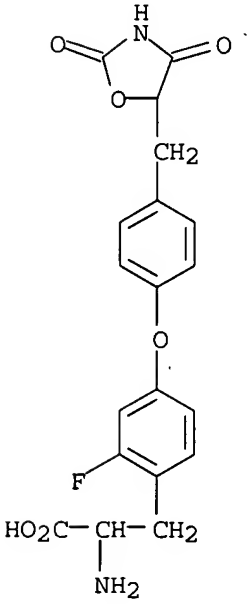
RN 724761-63-1 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinylidene)methyl]phenyl]-2-fluoro- (9CI) (CA INDEX NAME)



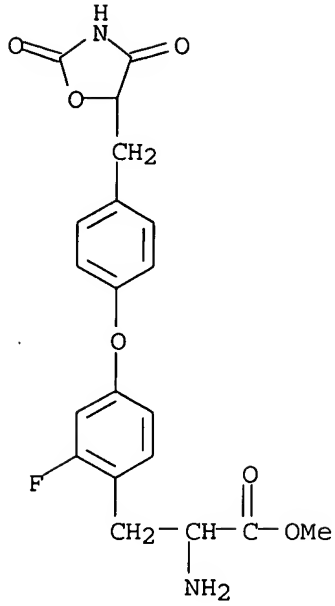
RN 724761-64-2 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinylidene)methyl]phenyl]-2-fluoro-, methyl ester (9CI) (CA INDEX NAME)



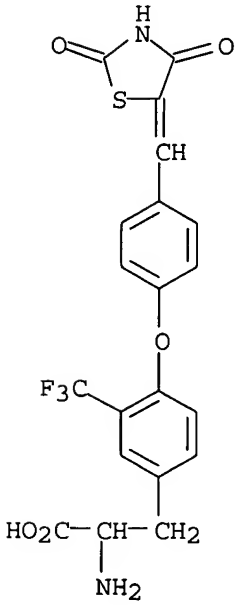
RN 724761-65-3 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinyl)methyl]phenyl]-2-fluoro- (9CI) (CA INDEX NAME)



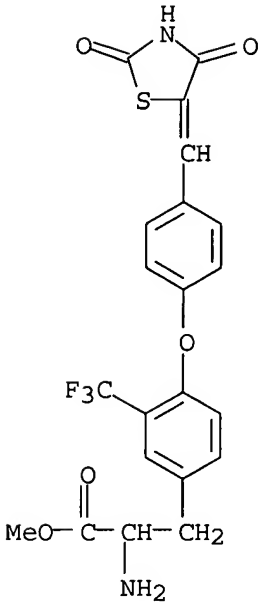
RN 724761-66-4 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinyl)methyl]phenyl]-2-fluoro-, methyl ester (9CI) (CA INDEX NAME)



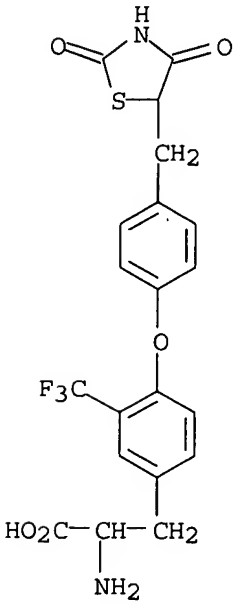
RN 724761-67-5 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]phenyl]-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



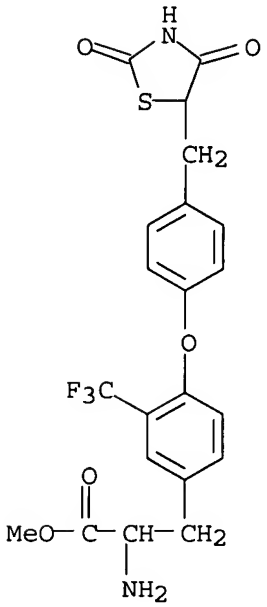
RN 724761-68-6 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]phenyl]-3-(trifluoromethyl)-, methyl ester (9CI) (CA INDEX NAME)



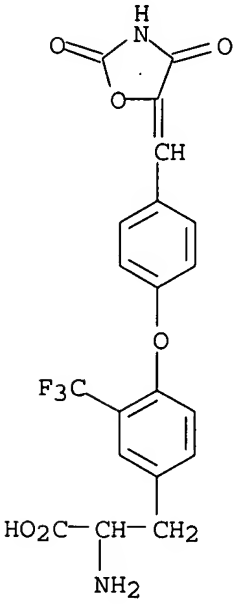
RN 724761-69-7 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



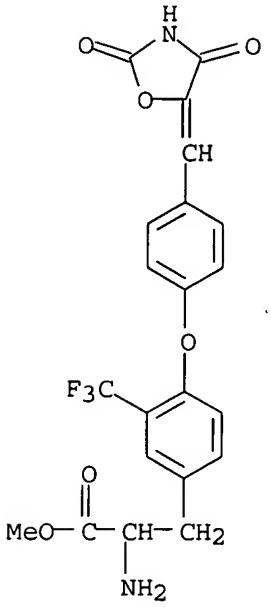
RN 724761-70-0 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]-3-(trifluoromethyl)-, methyl ester (9CI) (CA INDEX NAME)



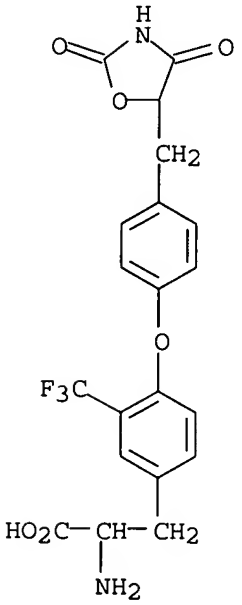
RN 724761-71-1 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinylidene)methyl]phenyl]-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



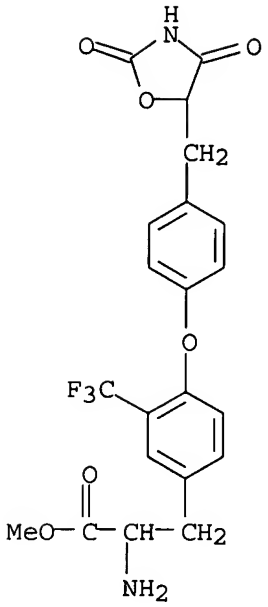
RN 724761-72-2 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinylidene)methyl]phenyl]-3-(trifluoromethyl)-, methyl ester (9CI) (CA INDEX NAME)



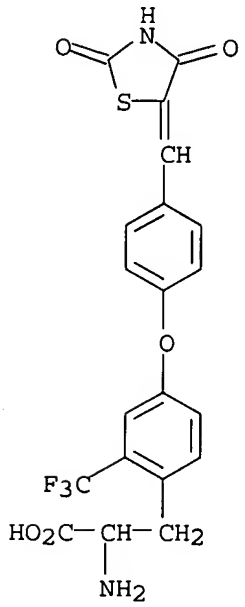
RN 724761-73-3 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinyl)methyl]phenyl]-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



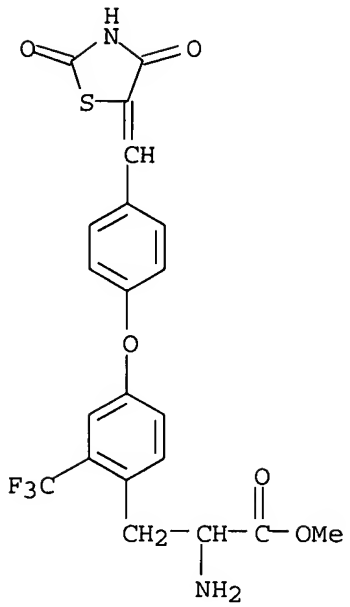
RN 724761-74-4 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinyl)methyl]phenyl]-3-(trifluoromethyl)-, methyl ester (9CI) (CA INDEX NAME)



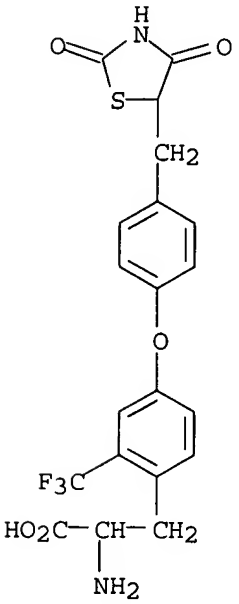
RN 724761-75-5 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]phenyl]-2-(trifluoromethyl)- (9CI) (CA INDEX NAME)



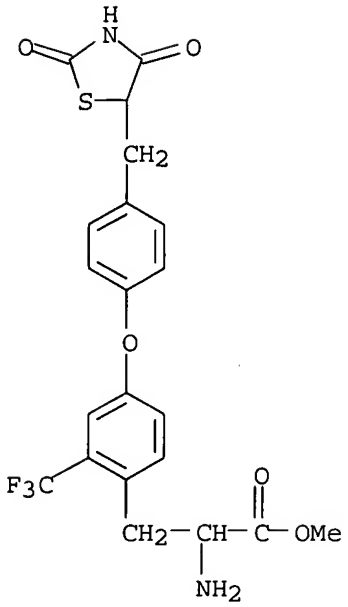
RN 724761-76-6 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]phenyl]-2-(trifluoromethyl)-, methyl ester (9CI) (CA INDEX NAME)



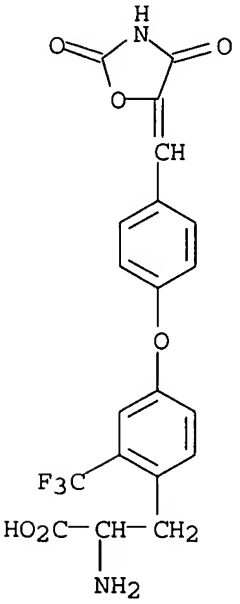
RN 724761-77-7 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]-2-(trifluoromethyl)- (9CI) (CA INDEX NAME)



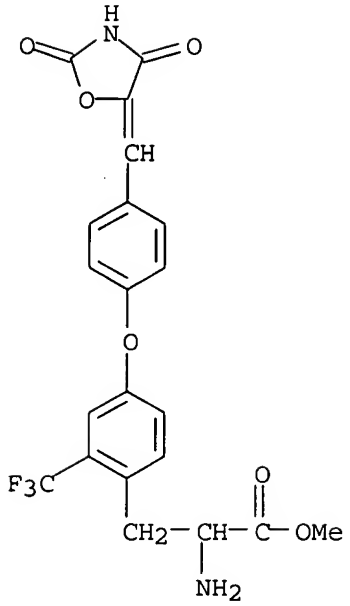
RN 724761-78-8 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]-2-(trifluoromethyl)-, methyl ester (9CI) (CA INDEX NAME)



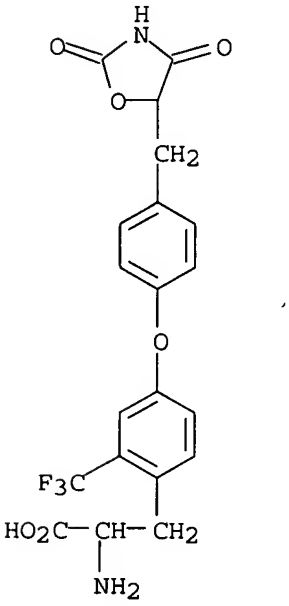
RN 724761-79-9 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinylidene)methyl]phenyl]-2-(trifluoromethyl)- (9CI) (CA INDEX NAME)



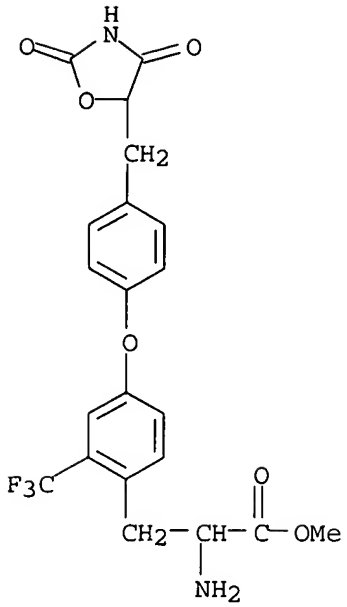
RN 724761-80-2 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinylidene)methyl]phenyl]-2-(trifluoromethyl)-, methyl ester (9CI) (CA INDEX NAME)



RN 724761-81-3 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinyl)methyl]phenyl]-2-(trifluoromethyl)- (9CI) (CA INDEX NAME)



RN 724761-82-4 HCAPLUS
CN Tyrosine, O-[4-[(2,4-dioxo-5-oxazolidinyl)methyl]phenyl]-2-(trifluoromethyl)-, methyl ester (9CI) (CA INDEX NAME)



RN 724761-83-5 HCAPLUS
CN Tyrosine, N-[(1,1-dimethylethoxy)carbonyl]-O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

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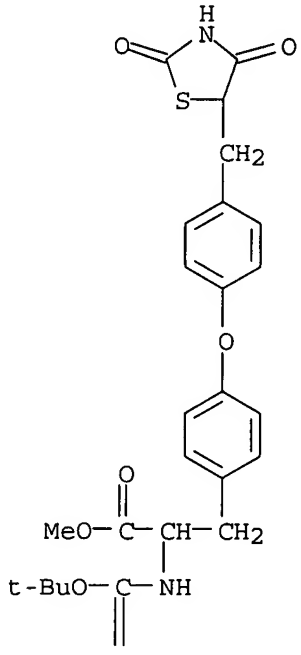

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RN 724761-84-6 HCAPLUS
CN Tyrosine, N-[(1,1-dimethylethoxy)carbonyl]-O-[4-[(2,4-dioxo-5-oxazolidinylidene)methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

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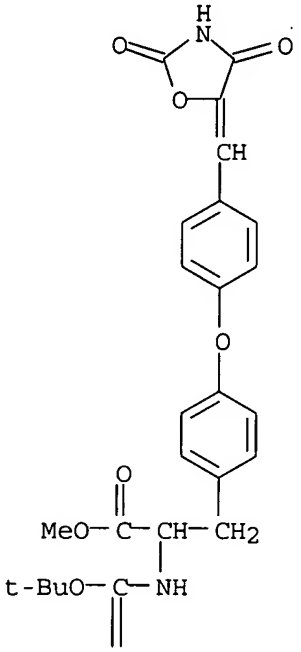

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RN 724761-85-7 HCAPLUS
CN Tyrosine, N-[(1,1-dimethylethoxy)carbonyl]-O-[4-[(2,4-dioxo-5-oxazolidinyl)methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

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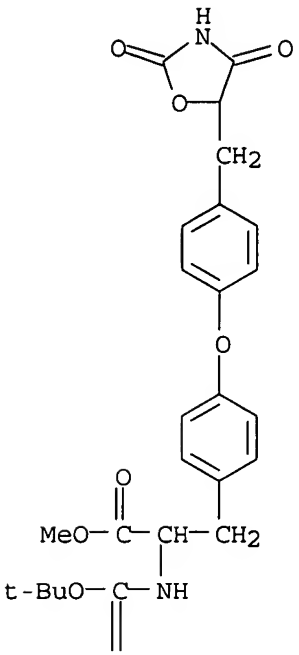

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RN 724761-86-8 HCAPLUS
CN Tyrosine, N-[(1,1-dimethylethoxy)carbonyl]-O-[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]phenyl]- (9CI) (CA INDEX NAME)

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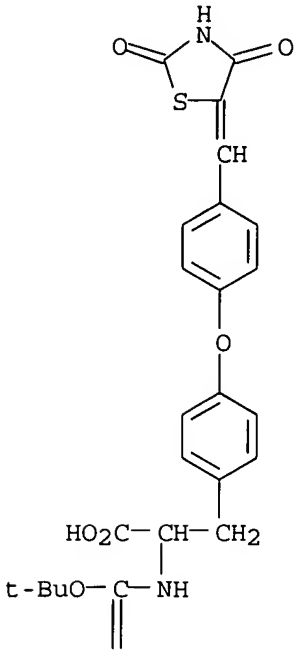

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RN 724761-87-9 HCAPLUS
CN Tyrosine, N-[(1,1-dimethylethoxy)carbonyl]-O-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]- (9CI) (CA INDEX NAME)

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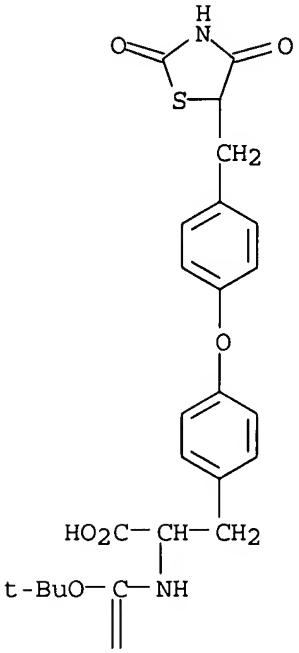

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RN 724761-88-0 HCAPLUS
CN Tyrosine, N-[(1,1-dimethylethoxy)carbonyl]-O-[4-[(2,4-dioxo-5-oxazolidinylidene)methyl]phenyl]- (9CI) (CA INDEX NAME)

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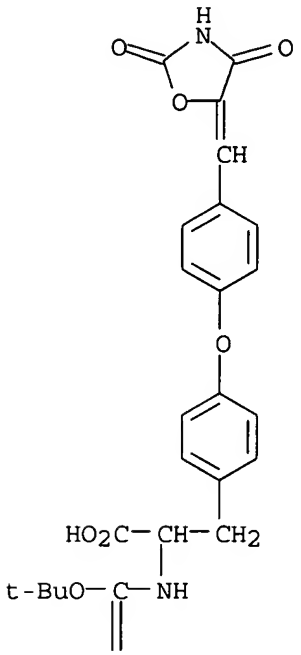

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RN 724761-89-1 HCAPLUS
CN Tyrosine, N-[(1,1-dimethylethoxy)carbonyl]-O-[4-[(2,4-dioxo-5-oxazolidinyl)methyl]phenyl]- (9CI) (CA INDEX NAME)

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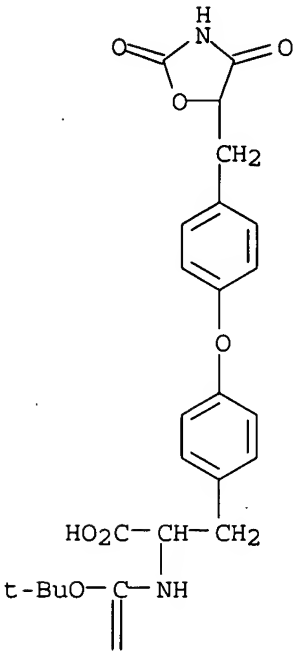

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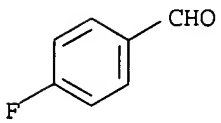
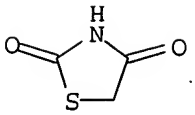
IT **459-57-4**, 4-Fluorobenzaldehyde **2295-31-0**, 2,4-Thiazolidinedione **2346-26-1**, 2,4-Oxazolidinedione **188576-13-8**, Methyl 2-[(tert-butoxycarbonyl)amino]-3-(4-hydroxyphenyl)propanoate
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactant; preparation of tyrosine thiazolidinylmethylphenyl ether derivs. for treatment of immunol. diseases, inflammation, obesity, hyperlipidemia, hypertension, neurol. diseases, and diabetes)

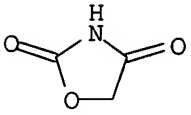
RN 459-57-4 HCAPLUS
CN Benzaldehyde, 4-fluoro- (9CI) (CA INDEX NAME)



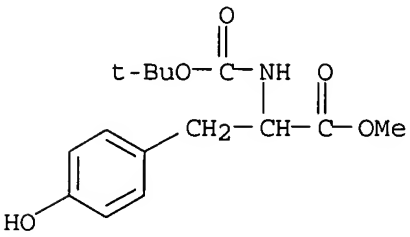
RN 2295-31-0 HCAPLUS
CN 2,4-Thiazolidinedione (8CI, 9CI) (CA INDEX NAME)



RN 2346-26-1 HCAPLUS
CN 2,4-Oxazolidinedione (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 188576-13-8 HCAPLUS
CN Tyrosine, N-[(1,1-dimethylethoxy)carbonyl]-, methyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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